APPLICATION FOR EQUIPMENT AUTHORIZATION

Type acceptance of a
NOKIA PCS 3 dB Booster Module
under
FCC ID: **L7KTBUL-01**

as a
PCS 3 dB Booster Module
under
Title 47 of the CFR, Part 24

MET REPORT EMI9333

February 3, 1998

PREPARED FOR:

NOKIA Telecommunications, Inc.
7 Village Circle, Suite 100
Westlake, TX 76262

PREPARED BY:

MET Laboratories, Inc.
914 West Patapsco Avenue
Baltimore, Maryland 21230-3493

Test Engineer: _____
Kenneth Bass

Reviewed by: _____
Christopher Harvey
EMI Laboratory Director

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MANUFACTURER & PRODUCT INFORMATION

TYPE OF AUTHORIZATION:	Type acceptance of a PCS 3 dB Booster Module as installed in a PCS (BTS) system Transmitter.
FCC IDENTIFIER:	L7KTBUL-01
APPLICABLE FCC RULES:	FCC Part 24 - 2.985/24.232(a); 2.987; 2.989/24.238; 2.993/24.238, 2.983(a) thru (g); 2.995(a)(1),(d)(1)/24.135(a); 2.991
CLIENT:	NOKIA Telecommunications, Inc. 7 Village Circle, Suite 100 Westlake, TX 76262
EQUIPMENT:	PCS 3 dB Booster Module
TESTING DATE(S):	January 13 thru 15, 1998
MANUFACTURER'S REPRESENTATIVE:	Mr. Jersey Lai

ENGINEERING STATEMENT

I ATTEST: the measurements shown in this report were made in accordance with the procedures indicated, and that the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

I FURTHER ATTEST: on the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of Part 24 of the FCC Rules under normal use and maintenance.

Kenneth Bass
EMI Engineer, MET Laboratories

MODIFICATIONS STATEMENT

No modifications were made during testing.

MET

EXHIBIT 5

INTRODUCTION

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INTRODUCTION

As required by §2.931 and §2.938 of 47 CFR, the following data is presented on behalf of the manufacturer, NOKIA Telecommunications, Inc., as verification of the compliance of the NOKIA PCS 3 dB Booster Module to the requirements of Part 24 of FCC CFR 47. (All references are to the most current version of 47 CFR in effect.)

TEST SITE

All testing was conducted at MET Laboratories, Inc., 914 West Patapsco Avenue, Baltimore, Maryland 21230-3493. Radiated emissions measurements were performed on a three-meter open air test site (OATS). In accordance with 47 CFR, §2.948, a complete site description is on file with the FCC Laboratory Division as 31040/SIT/MET.

MEASUREMENT PROCEDURES

As required by §2.993, *field strength of spurious radiation measurements* were made in accordance with the general procedures of ANSI C63.4-1992 "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9kHz to 40 GHz". Preliminary radiated emission measurements were performed inside a shielded chamber with all transmitters on and terminated. The frequency list from the preliminary measurements was used as a guide for making final measurements on an 10 meter open area test site. The unit was scanned over the frequency range of 9 kHz to 20 GHz using the following equipment:

Frequency Range	Input Transducer	Measurement Instrumentation
30 MHz to 1 GHz	Dipole Antenna Set	Spectrum Analyzer
above 1 GHz	Double Ridged Guide Horn	Spectrum Analyzer

Radiated Spurious RF emissions must be attenuated by 43+10log(P) from the calculated field strength of the fundamental emission as radiated from a tuned dipole.

$E(V/m)=\sqrt{(49.2 * P)/R}$

$P_{(Tx + Booster)}$ =32.81 watts correlated to 152.17 dBuV/m at 1 meter and 142.53 dBuV/m at 3 meters

The attenuation required is 43+10log(32.81W) = 58.16 dB

Thus, the spurious limits are: 94.01 dBuV/m at 1 meter and 84.73 dBuV/m at 3 meters

[A more detailed derivation of the spurious emissions limits is on page 25.]

As required by §2.985 of CFR 47, *RF power output measurements* were made at the RF output terminals using an attenuator and spectrum analyzer. This test was performed with carrier modulated by a GMSK modulation signal. No significant difference in RF field strength was noted when compared to the RF field strength level with the EUT set for frequency hopping mode.

Frequency tolerance measurements, as required by §2.995 of CFR 47, were not performed on the PCS 3 dB Booster Module over the tempurature range -30 C to +50 C, or for variations of the primary voltage between 85% and 115% (of the rated supply voltage). These measurements were performed during Authorization of the attached BTS transmitter module and were therefore not necessary for the 3 dB Booster Module.

As required by §2.989 of CFR 47, *occupied bandwidth measurements* were made on the 3 dB Booster Module pre- and post- module. The transmitter was configured to transmit a random data pattern which produced a GMSK signal to modulate the carrier. The limit was calculated from FCC Rule 24.238. We determined the resolution bandwidth (RBW) at which the frequency components of the transmission could be resolved. Using this bandwidth, we determined the 26dB bandwidth of the emission at the lowest, a middle, and highest selectable channel range.

As recommended in §2.238, 1% of this 26dB bandwidth was chosen to measure the peak of any spurious emission inside the 1.0 MHz frequency band adjacent to each frequency block edge. This test was also performed at a reduced power level for those channels that were previously blocked (i.e. used as guard band channels). The reduced RF power level at these previously blocked channels is accomplished with software where the final rev. of the software will not allow the user to adjust the output power at these frequencies beyond the levels presented in this report. All other frequencies were measured using a 1.0 MHz RBW. The unit was exercised using signal types required by §2.989.

As required by §2.991 of CFR 47, *spurious emissions at antenna terminal measurements* were made at the RF output terminals using a 50 Ω attenuator and spectrum analyzer set for a 100 KHz bandwidth. This test was performed with a GMSK modulated carrier signal. The Transmitter was adjusted for continuous transmit on frequencies at the low, middle, and high frequencies in the band of operation. The frequency spectrum was investigated from 10.0 KHz to 20.0 Ghz. For measuring emissions above 2 Ghz, a high-pass filter was used to eliminate the fundamental transmit frequency to prevent possible saturation effects on the front end of the spectrum analyzer.

MET

INSTRUMENTATION

Radiated emissions measurements were made using a Hewlett-Packard 8563A Spectrum Analyzer. EMCO models 3104 biconical and 3146A log period antennas were used as input for the frequency range 30 - 1000 MHz. From 1- 18 GHz, an EMCO Model 3115 Double-Ridge Guided Horn antenna was used. From 18 - 20 Ghz a Waveline model 899 Standard Gain Horn antenna was used.

Carrier field strength measurements, when necessary, were made using the equipment described above.

Occupied bandwidth measurements were made using a Hewlett-Packard 8563A Spectrum Analyzer.

TEST CONFIGURATION

The 3 dB Booster Modules was installed between the RF output port and bandpass filter stages of an indoor BTS cabinet and configured in accordance with the manufacturer's instructions. The EUT with host BTS (base tranceiver station) was operated in a manner representative of the typical usage of the equipment. During all testing, system components were manipulated within the confines of typical usage to maximize each emission.

Radiated spurious emissions were performed with the transmitter modules, 3 dB Booster Module, and Mast Head Amplifier (MHA) modules installed in the indoor cabinets.

EXHIBIT 6

TEST DATA

SUBJECT: Radiated Emissions
GMSK Modulated Carrier
FCC Part 24

MET REPORT: EMI9333
MFG: NOKIA
TESTED BY: Kenneth Bass
TEST DATE(S): 15 Jan 1998

EUT: 3 dB Booster Module
MODEL: TBUL11

TECHNICAL SPECIFICATION: 2.993; 24.238(a)

Carrier Emission: 32.81 Watts
Spurious Emissions Limits: See table below and text on page 24

FREQUENCY	EUT AZIMUTH	ANTENNA		EUT RADIATION	ANTENNA FACTOR	TEST DISTANCE	CABLE LOSS	AMP GAIN MINUS FILTER LOSS	FIELD STRENGTH	LIMITS @ 3m
(MHz)	(Degrees)	POL (H/V)	HGT (m)	(dBµV)	(dB/m)	(m)	(dB)	(dBµV)	(dBuV/m)	(dBuV/m)
177.57	135	H	2.0	15.4	15.6	3	1.25	n/a	32.25	84.37
177.57	0	V			16.0	3	1.25	n/a	33.45	84.37
179.11	135	H	1.5	15.3	15.6	3	1.25	n/a	32.15	84.37
179.11	315	V	1.5	16.7	16.2	3	1.25	n/a	34.15	84.37
188.21	180	H	2.0	15.1	16.5	3	1.25	n/a	32.85	84.37
188.21	315	V	2.5	14.4	17.0	3	12.5	n/a	32.65	84.37
185.03	90	H	1.5	14.8	16.1	3	1.25	n/a	32.05	84.37
185.03	270	V	1.5	14.9	16.6	3	1.25	n/a	32.75	84.37
272.00	180	H	2.0	13.0	18.0	3	1.75	n/a	32.75	84.37
272.00	270	V	1.5	13.0	19.0	3	1.75	n/a	32.35	84.37
389.09	0	H	2.0	14.1	19.3	3	1.5	n/a	34.9	84.37
389.09	315	V	1.5	14.0	19.6	3	1.5	n/a	35.1	84.37

Equipment meets the specifications of 2.985, 2.993, 24.238(a)

SUBJECT:	Radiated Emissions GMSK Modulated Carrier FCC Part 24	**MET REPORT:** **MFG:** **TESTED BY:** **TEST DATE(S):**	EMI9333 NOKIA Kenneth Bass 15 Jan 1998

EUT: 3 dB Booster Module
MODEL: TBUL11
TECHNICAL SPECIFICATION: 2.993; 24.238(a)

The radiated spurious emissions limit is obtained by the following:

Based on an input power (as measured at the output of the Mast Head Amplifier) of 32.81 watts:

$P_o = 32.81$ W

As per 2.993 (a), it is assumed this power is to be fed to a half-wave tuned dipole. Using a conversion formula for distance, the field strength at one meter can be derived:

$$E(V/m)_{1m} = \frac{\sqrt{49.2 \; X \; 32.81}}{1}$$

$$E(V/m)_{1m} = 40.17 \; V/m \; or \; 153.00 \; db\mu V$$

As per 24.238, the spurious emissions must be attenuated by 43 + log(P) which is:

$$43 + 10Log(32.81) = 58.16 \; dB$$

Therefore, the limit for spurious emissions is:

$$152.17 \; dB\mu V - 58.168 \; dB = 94.01 \; dB\mu V \; @ \; 1m$$

At 3 meters measurement distance, the limit is;

$$E(V/m)_{3m} = \frac{\sqrt{49.2 \; X \; 32.81}}{3}$$

$$E(V/m)_{3m} = 13.39 \; V/m \; or \; 142.53 \; db\mu V$$

Again, according to 24.238, all signals must be attenuated by 58 dB;
Therefore, the limit for spurious emissions for a test distance of 3 meters is:

$$142.53 - 58.16 = 84.37 \; dB\mu V \; @ \; 3m$$

SUBJECT:	Occupied Bandwidth GMSK modulated Carrier FCC Part 24	**MET REPORT:** **MFG:** **TESTED BY:** **TEST DATE(S):**	EMI9333 NOKIA Kenneth Bass 14 Jan 1998

EUT: 3 dB Booster Module
MODEL: TBUL11

Comment: Equipment complies with Section 2.989. The fundamental emission is confined within a 313 KHz band (maximum) centered on the actual carrier frequency. The resolution bandwidth (RBW) selected for the measurement was 10 KHz. Plots of the occupied bandwidth, as measured at the Transmitter RF output port and at the antenna output port, are presented on the following pages.

Results: The following plots illustrate that the introduction of the 3 dB booster module as implemented in the RF path (after the Tx output) will broaden the signal bandwidth from 298 kHz to 313 kHz.

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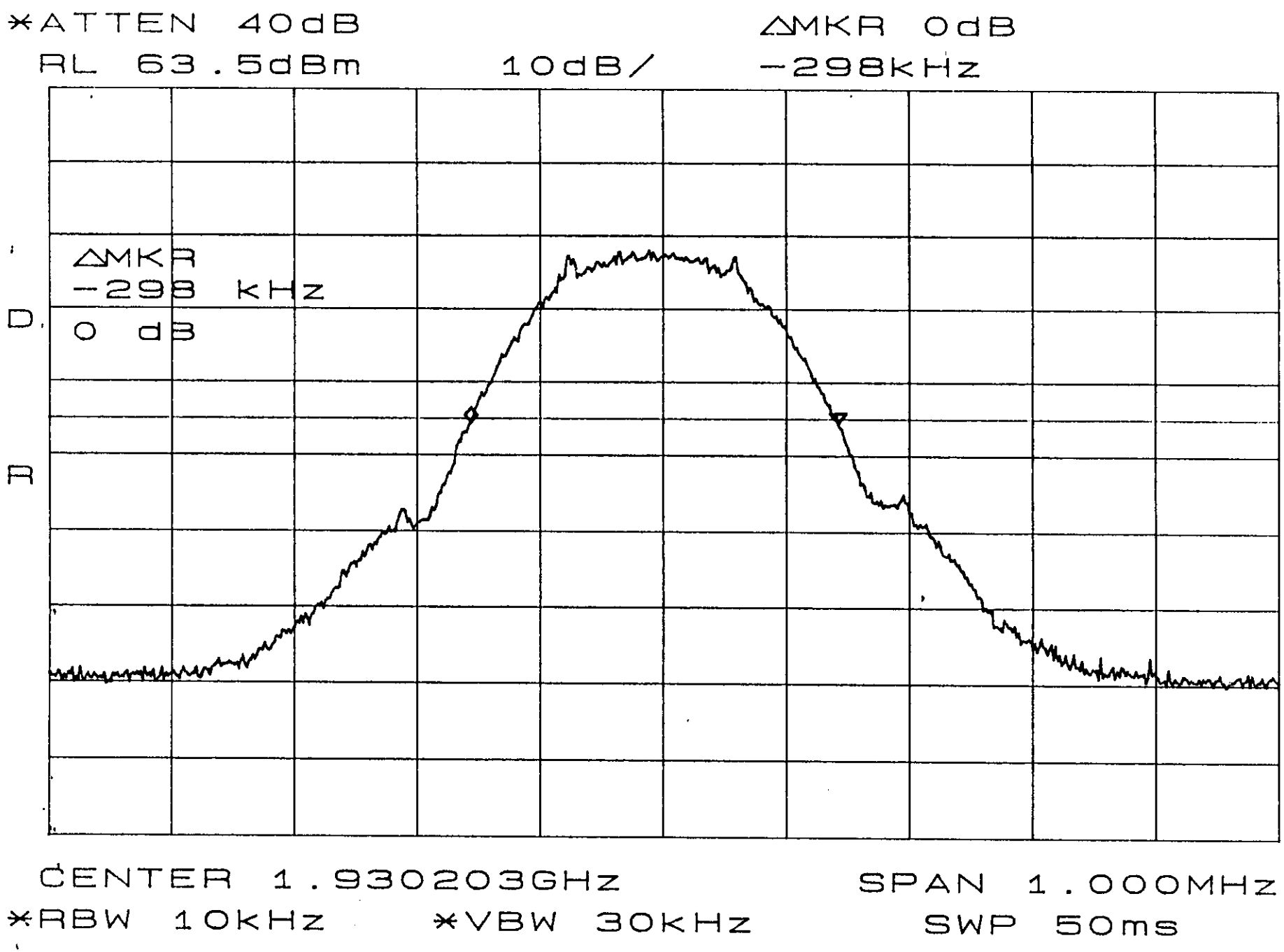
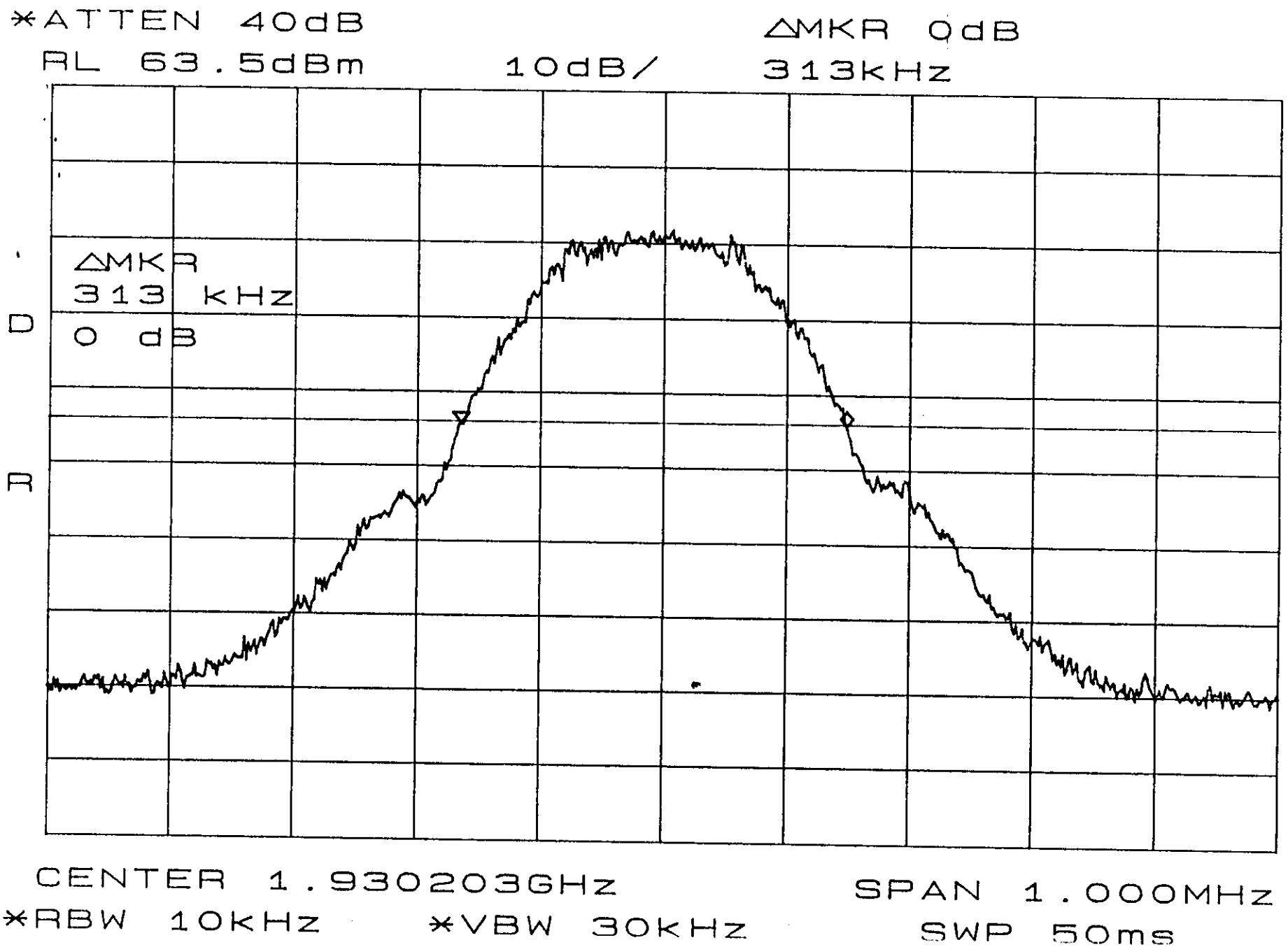

*ATTEN 40dB
RL 63.5dBm
10dB/
ΔMKR 0dB
-298kHz
ΔMKR
-298 kHz
0 dB
D.
R
CENTER 1.930203GHz
SPAN 1.000MHz
*RBW 10kHz
*VBW 30kHz
SWP 50ms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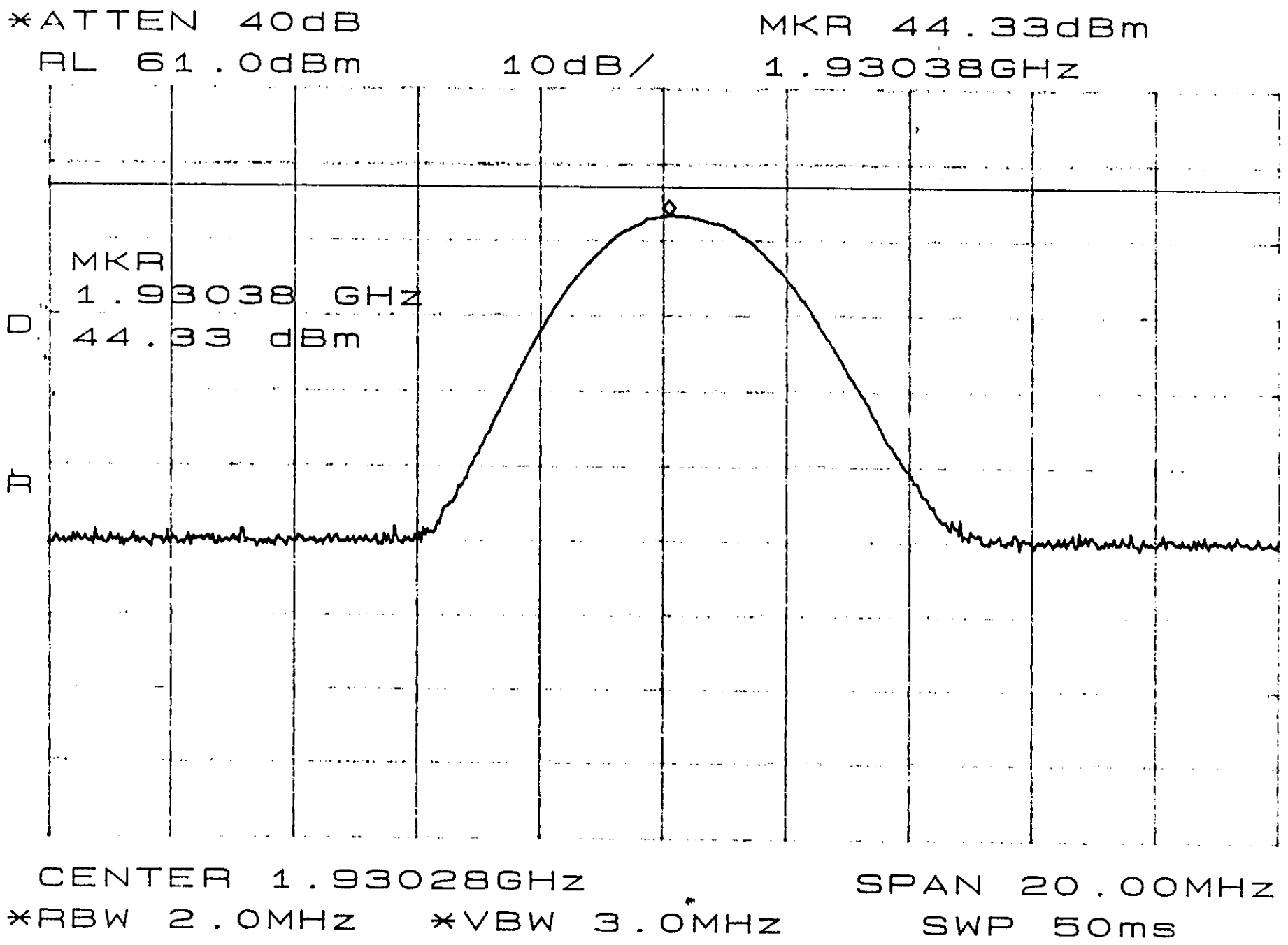
RL 63.5dBm
10dB/
ΔMKR 0dB
313kHz
ΔMKR
313 kHz
0 dB
D
R
CENTER 1.930203GHz
SPAN 1.000MHz
*RBW 10kHz
*VBW 30kHz
SWP 50ms

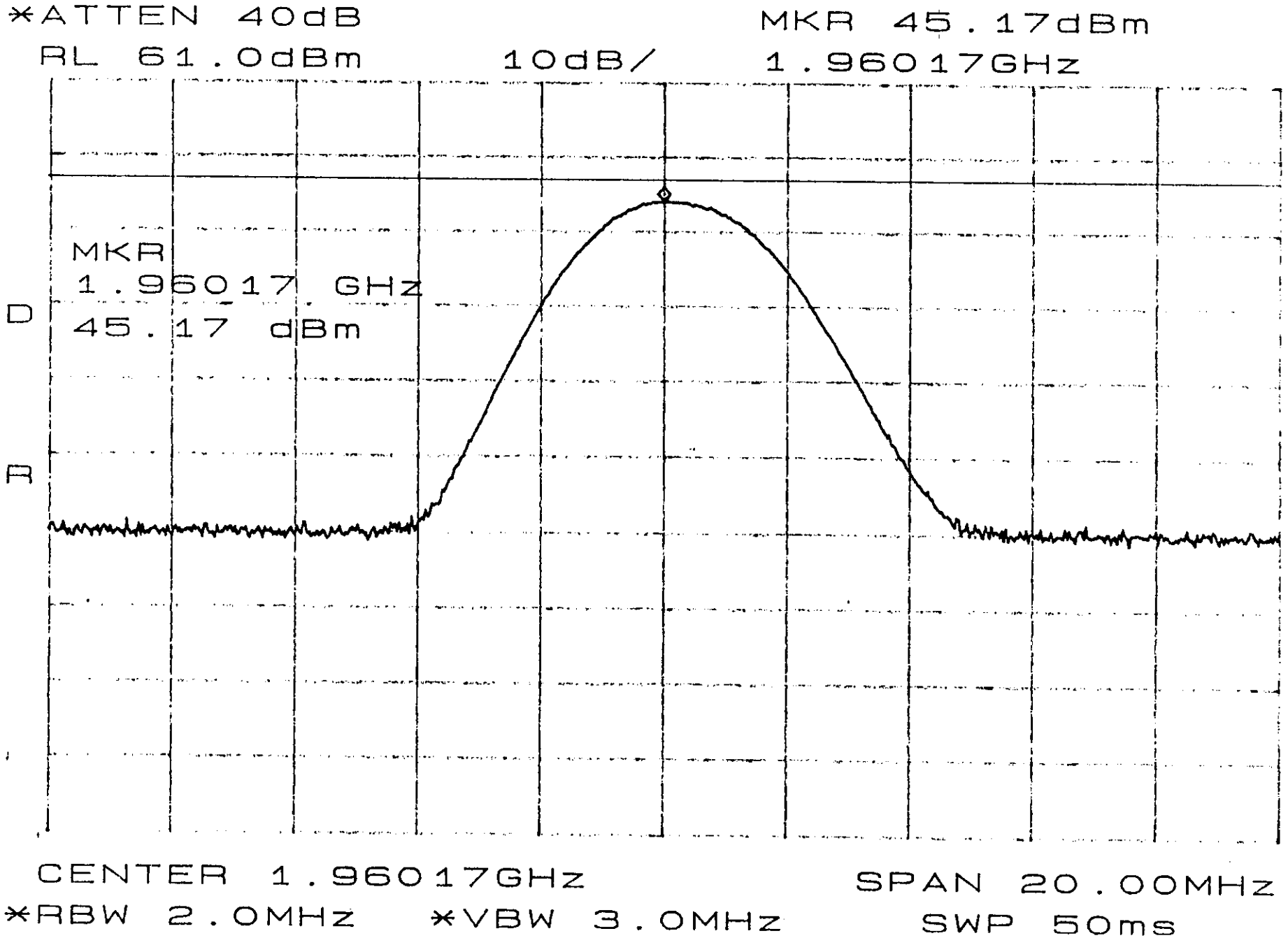
SUBJECT:	RF Power Output	**MET REPORT:**	EMI9333
		MFG:	NOKIA
	FCC Part 24	**TESTED BY:**	Kenneth Bass
		TEST DATE(S):	14 Jan 1998

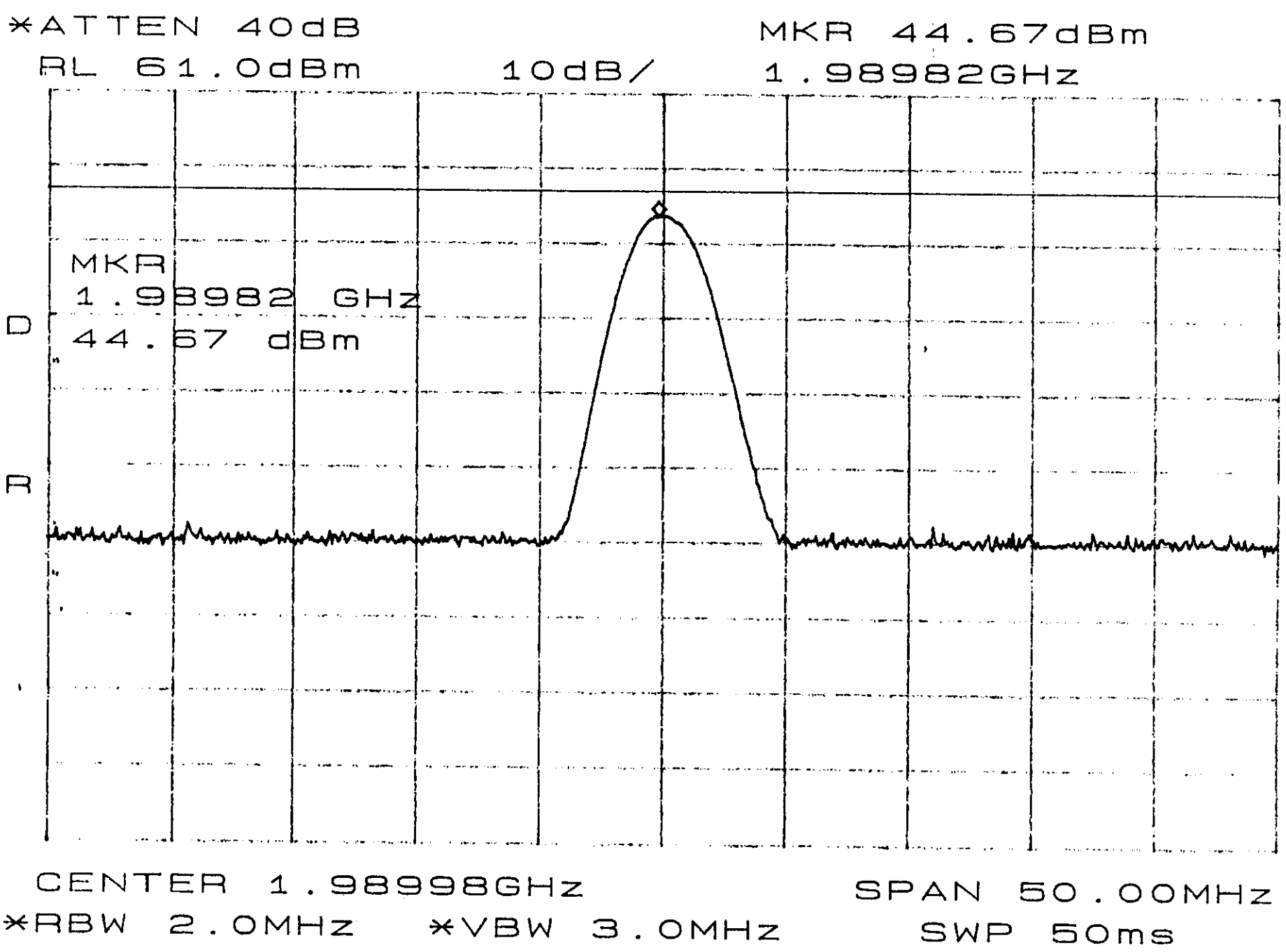
EUT: 3 dB Booster Module
MODEL: TBUL11

Comment: Equipment complies with Section 2.985 and 24.232(a). The transmitter power shall not exceed 100 W (157 dBµV) at the carrier frequency.

Plots of the RF output Power level of the GMSK modulated carrier, as measured at the RF output terminals of the MHA (mast head amplifier), appear on the following pages. The transmitter power output was measured for Channels at the low, middle, and high end of the transmitter frequency range. The spectrum analyzer was replaced with an HP RF power meter for comparison. The levels obtained with the spectrum analyzer are displayed on the following graphs.


*ATTEN 40dB
RL 61.0dBm
10dB/
MKR 44.33dBm
1.93038GHz
MKR
1.93038 GHz
44.33 dBm
D
R
CENTER 1.93028GHz
SPAN 20.00MHz
*RBW 2.0MHz
*VBW 3.0MHz
SWP 50ms


*ATTEN 40dB
RL 61.0dBm
10dB/
MKR 45.17dBm
1.96017GHz
MKR
1.96017 GHz
45.17 dBm
D
R
CENTER 1.96017GHz
SPAN 20.00MHz
*RBW 2.0MHz
*VBW 3.0MHz
SWP 50ms


*ATTEN 40dB
RL 61.0dBm
10dB/
MKR 44.67dBm
1.98982GHz
MKR
1.98982 GHz
44.67 dBm
D
R
CENTER 1.98998GHz
SPAN 50.00MHz
*RBW 2.0MHz
*VBW 3.0MHz
SWP 50ms

MET

SUBJECT: Spurious Emissions at Antenna Terminals FCC Part 24

MET REPORT: EMI9333
MFG: NOKIA
TESTED BY: Kenneth Bass
TEST DATE(S): 14 Jan 1998

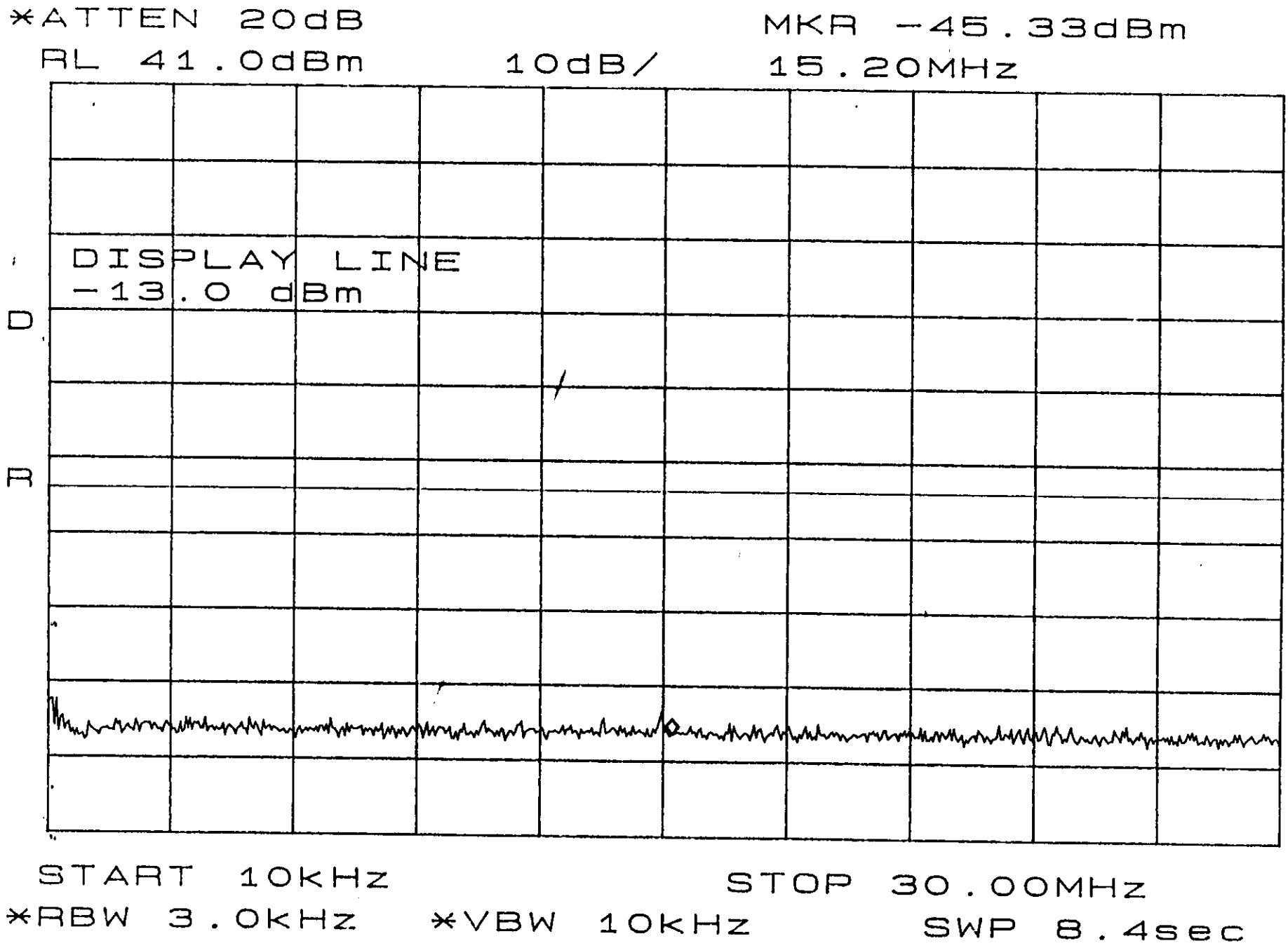
EUT: 3 dB Booster Module
MODEL: TBUL11

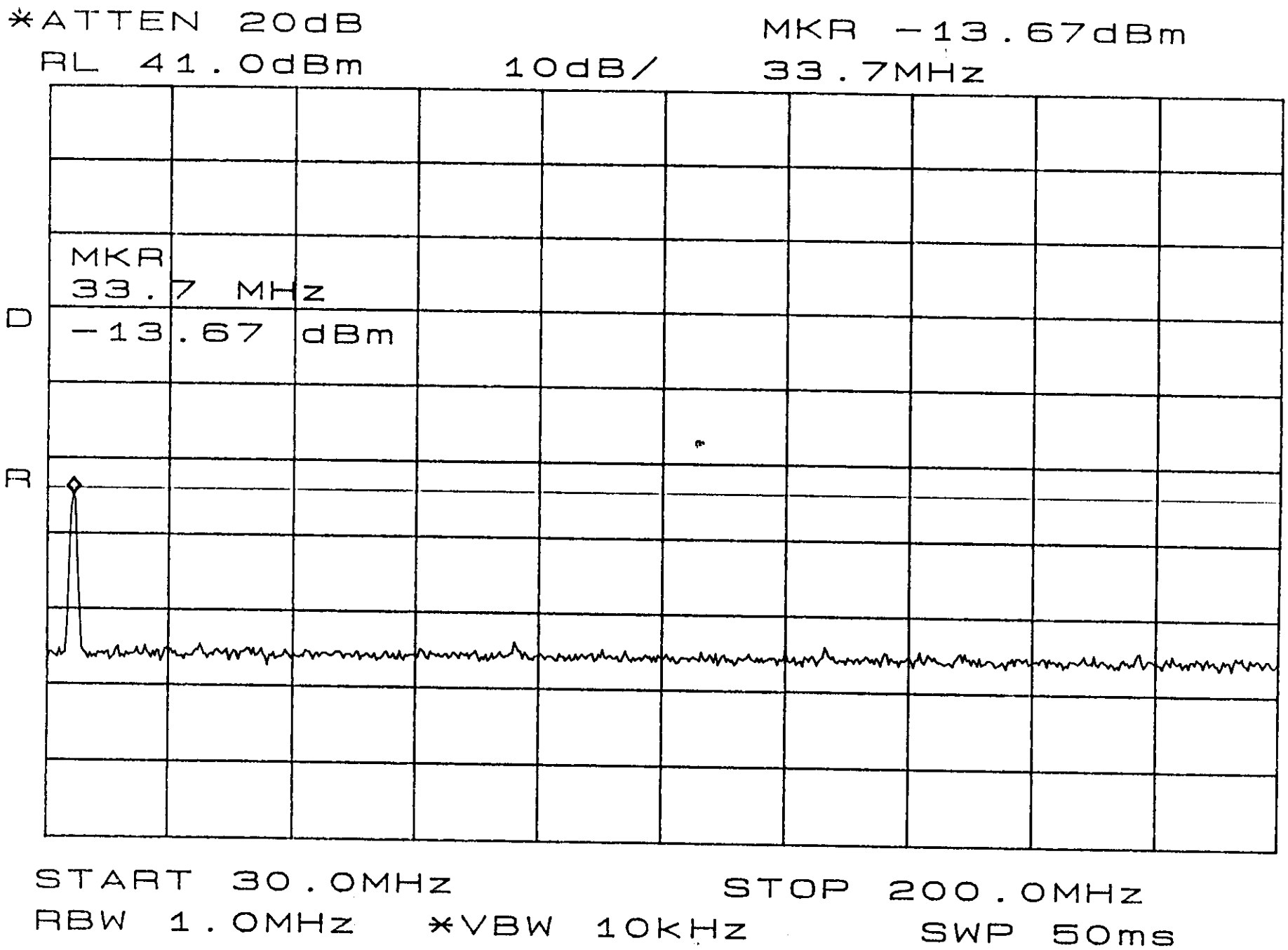
Comment: Equipment complies with Section 2.991. Spurious emissions were measured at the antenna terminal with the Transmitter tuned to transmit on a frequency in the low, middle, and high end of its tuneable range. Summaries of the highest emissions appear on the following pages. The following data is a summary of the emissions present with the Transmitter tuned to a frequency in the low end of operating range.

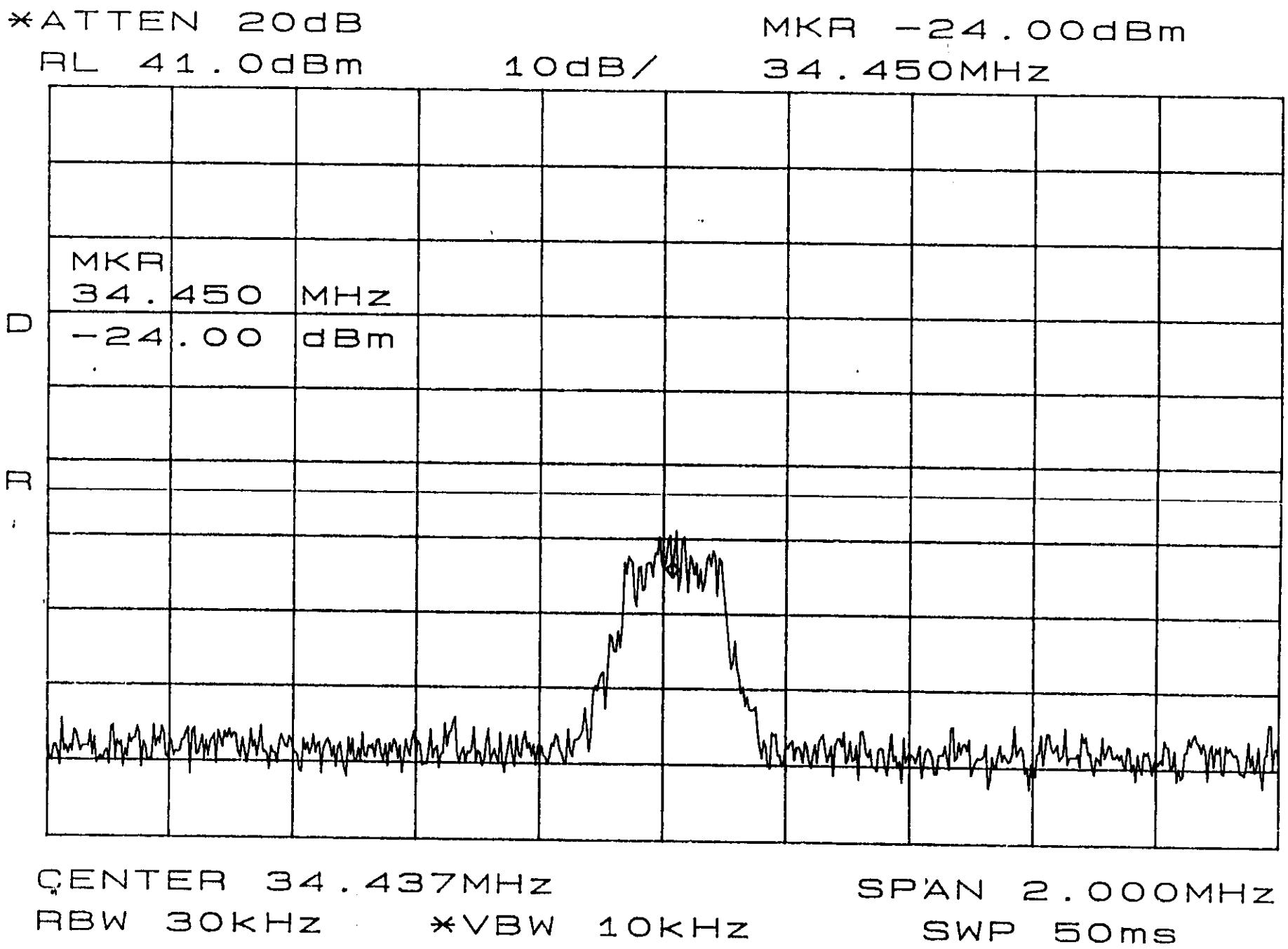
SUMMARY OF SPURIOUS EMISSIONS AT ANTENNA TERMINALS - BLOCK A

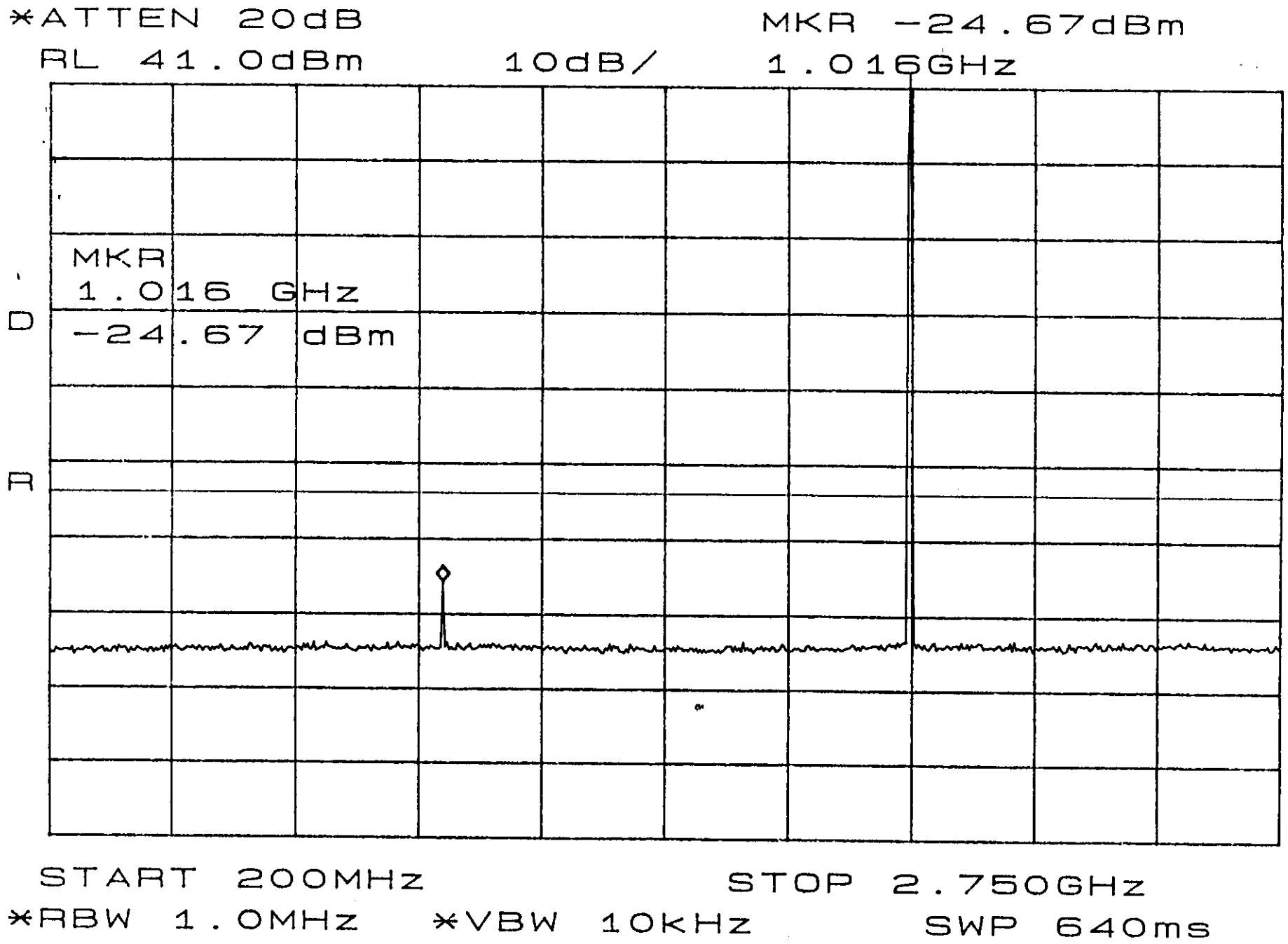
Frequency Range	Emission Frequency	Emission Level (dBm)	Limit (dBm)
10 kHz - 30 MHz	none	n/a	-13.1
30 - 200 MHz	34.450	-24.00	-13.1
200 MHz - 2.75 GHz	1.016	-24.67	-13.1
2.75 - 5.00 Ghz	3.969	-28.00	-13.1
5.00 - 10.0 GHz	5.967	-26.83	-13.1
10 - 20 GHz	none	n/a	-13.1

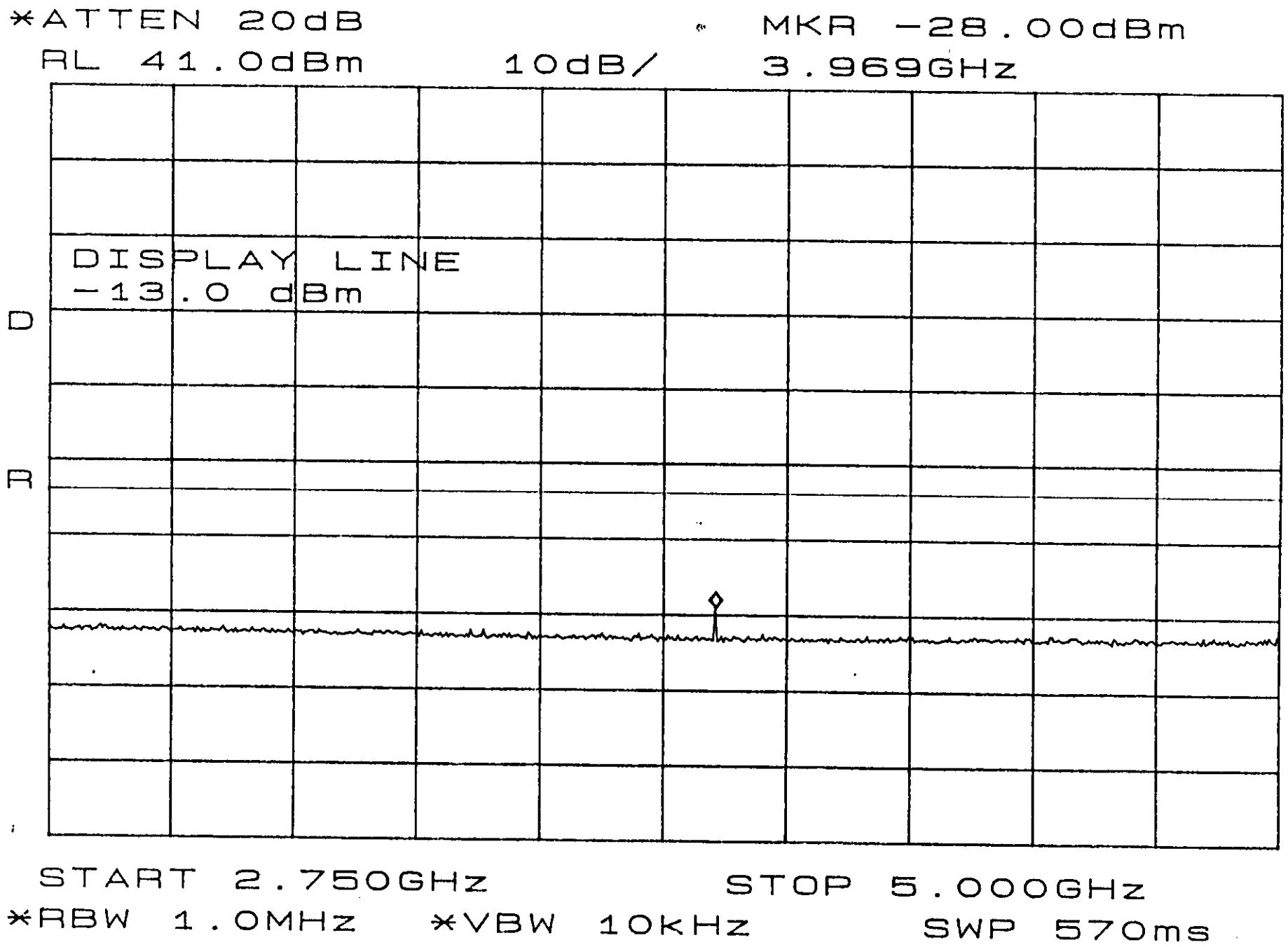
Plots of the spurious emissions as measured at the antenna port, appear on the following pages.

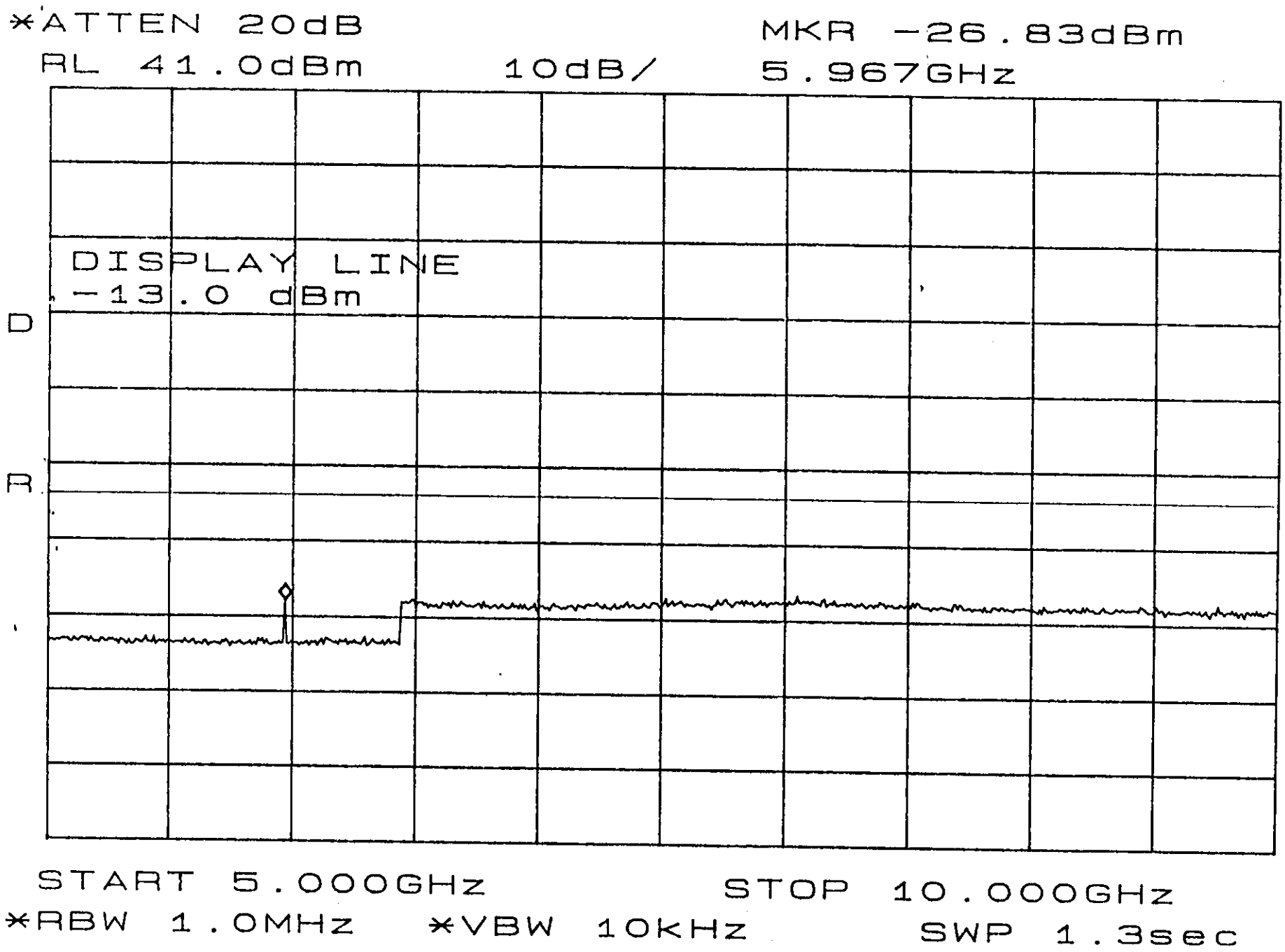

*ATTEN 20dB
MKR -45.33dBm
RL 41.0dBm
10dB/
15.20MHz
DISPLAY LINE
-13.0 dBm
D
R
START 10kHz
STOP 30.00MHz
*RBW 3.0kHz
*VBW 10kHz
SWP 8.4sec

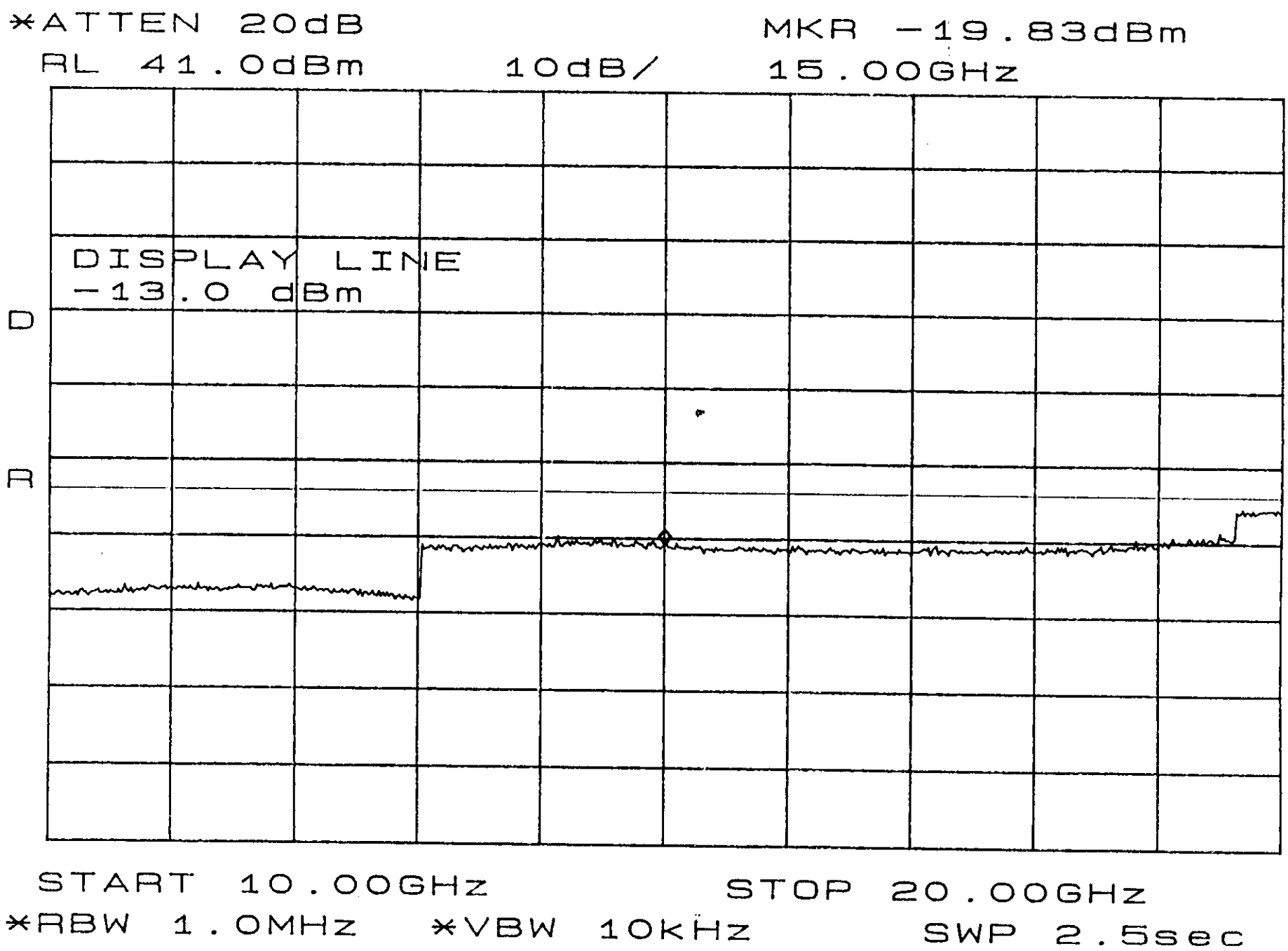

*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -13.67dBm
33.7MHz
MKR
33.7 MHz
-13.67 dBm
D
R
START 30.0MHz
STOP 200.0MHz
RBW 1.0MHz
*VBW 10kHz
SWP 50ms


*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -24.00dBm
34.450MHz
MKR
34.450 MHz
-24.00 dBm
D
R
CENTER 34.437MHz
SPAN 2.000MHz
RBW 30kHz
*VBW 10kHz
SWP 50ms


*ATTEN 20dB
MKR -24.67dBm
RL 41.0dBm
10dB/
1.016GHz
MKR
1.016 GHz
-24.67 dBm
D
R
START 200MHz
STOP 2.750GHz
*RBW 1.0MHz
*VBW 10KHz
SWP 640ms


*ATTEN 20dB
MKR -28.00dBm
RL 41.0dBm
10dB/
3.969GHz
DISPLAY LINE
-13.0 dBm
D
R
START 2.750GHz
STOP 5.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 570ms


*ATTEN 20dB
MKR -26.83dBm
RL 41.0dBm
10dB/
5.967GHz
DISPLAY LINE
-13.0 dBm
D
R
START 5.000GHz
STOP 10.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 1.3sec


*ATTEN 20dB
MKR -19.83dBm
RL 41.0dBm
10dB/
15.00GHz
DISPLAY LINE
-13.0 dBm
D
R
START 10.00GHz
STOP 20.00GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 2.5sec

SUBJECT: Spurious Emissions at Antenna Terminals FCC Part 24

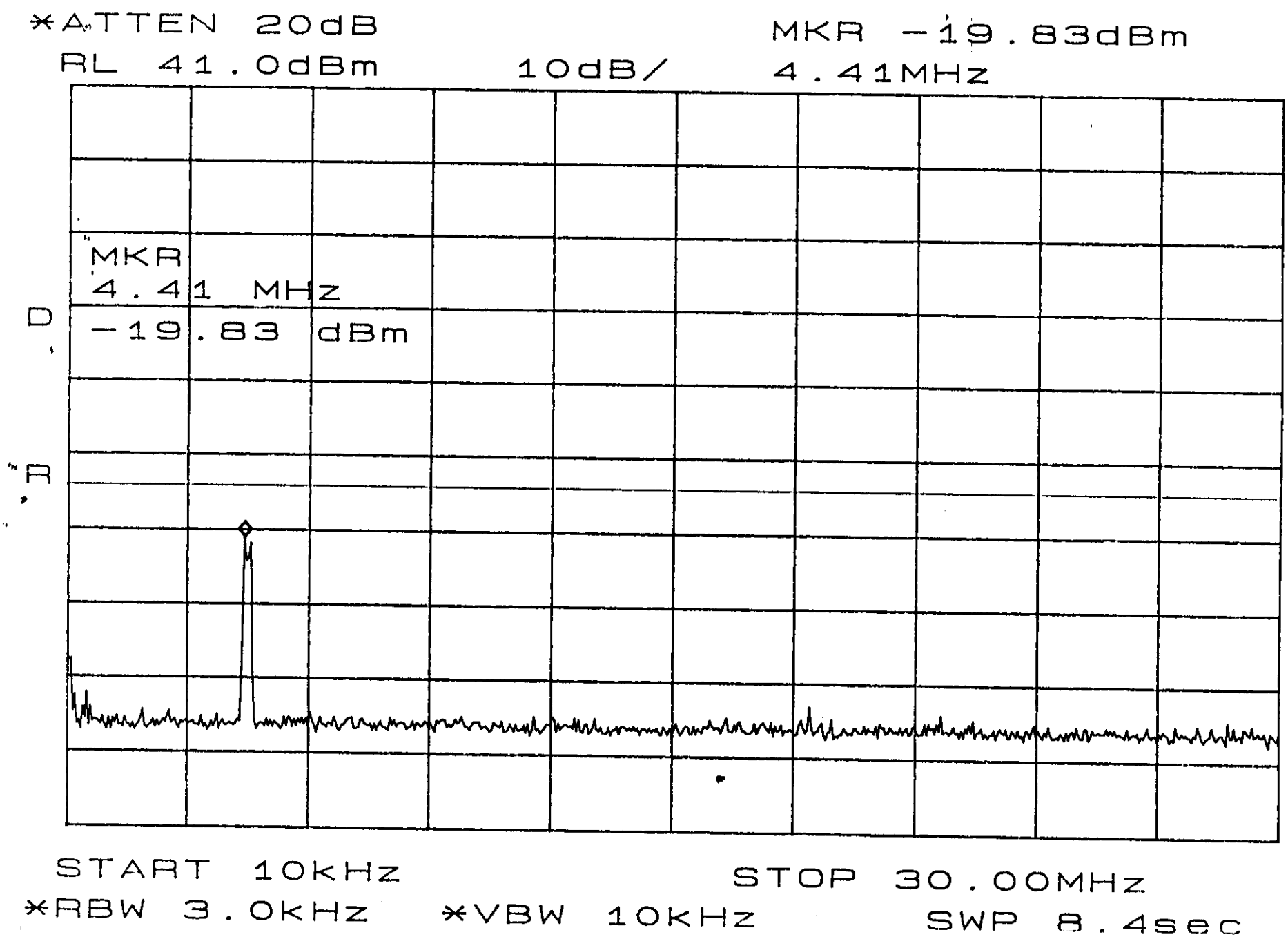
MET REPORT: EMI9333
MFG: NOKIA
TESTED BY: Kenneth Bass
TEST DATE(S): 14 Jan 1998

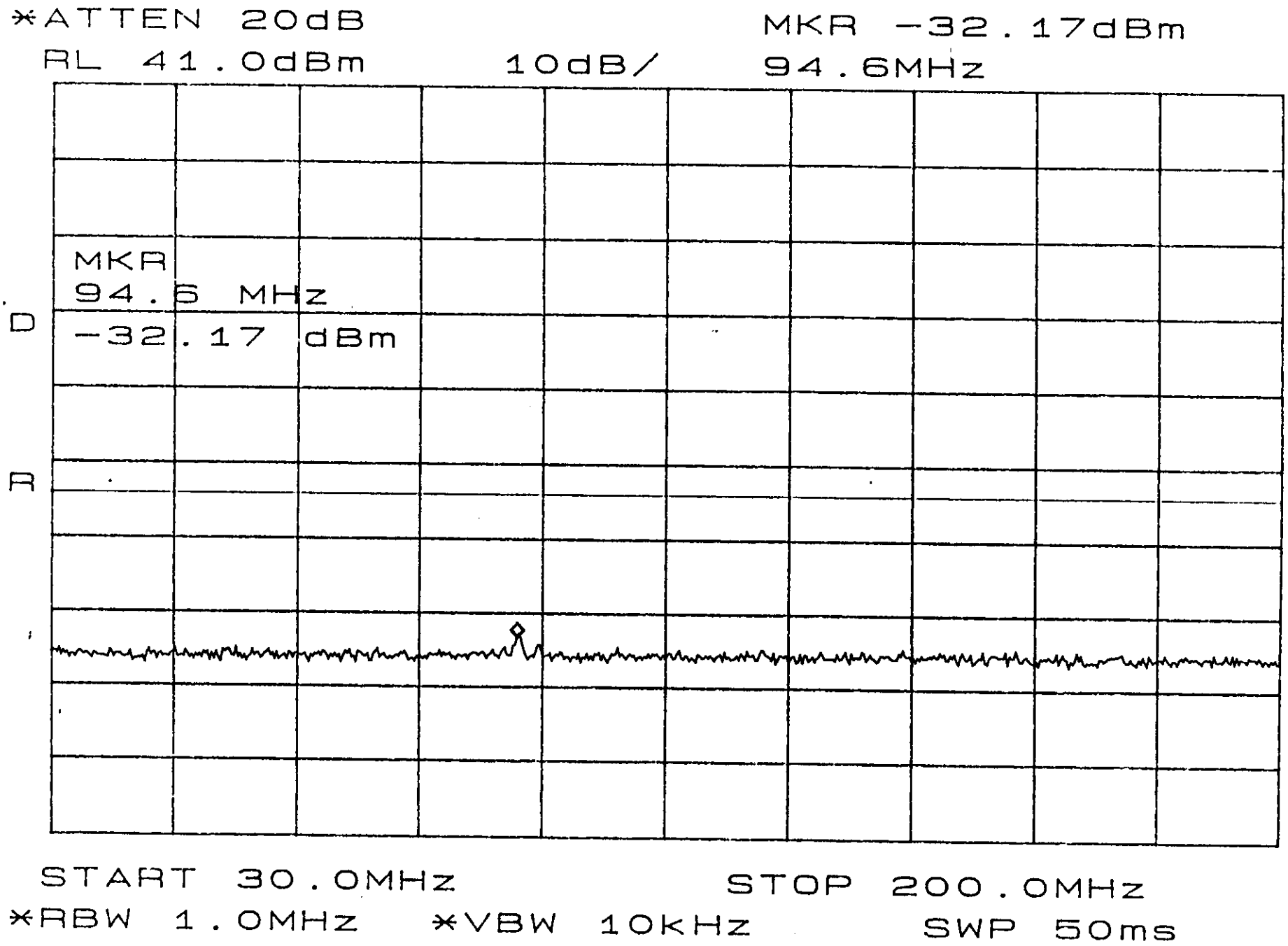
EUT: 3 dB Booster Module
MODEL: TBUL11

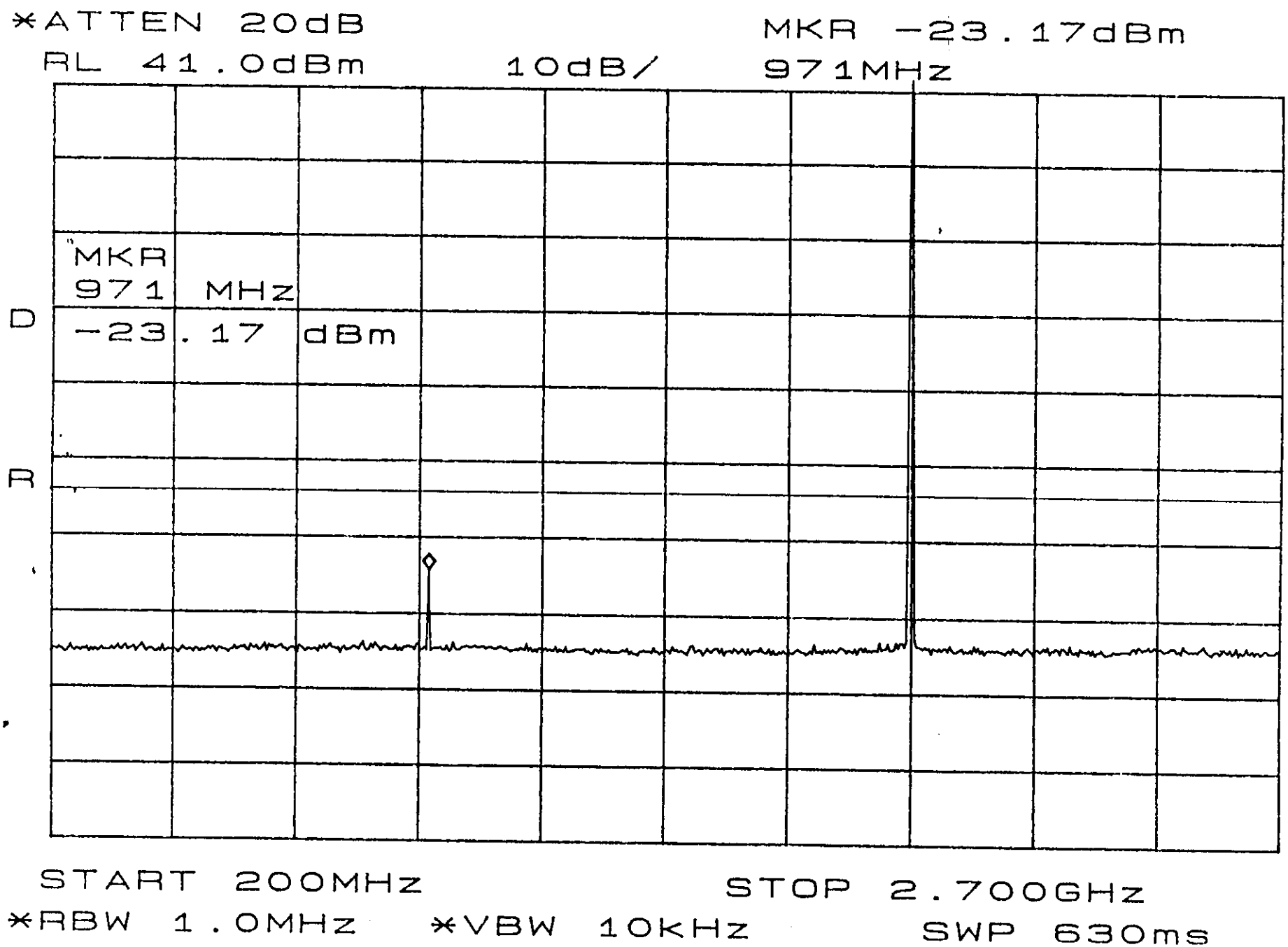
Comment: Equipment complies with Section 2.991. The transmitter was tuned to transmit at a frequency in the center of the frequency range of operation.

SPURIOUS EMISSIONS AT ANTENNA TERMINALS - BLOCK E

Frequency Range	Emission Frequency	Emission Level (dBm)	Limit (dBm)
10 kHz - 30 MHz	4.41 MHz	-19.83	-13.1
30 - 200 MHz	94.6	-32.17	-13.1
200 MHz - 2.7 GHz	971 MHz	-23.17	-13.1
2.7 - 5.0 GHz	3.909	-27.50	-13.1
5.0 - 10 GHz	5.883	-30.00	-13.1
10 - 20 GHz	none	n/a	-13.1


*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -19.83dBm
4.41MHz
MKR
4.41 MHz
-19.83 dBm
D
R
START 10kHz
STOP 30.00MHz
*RBW 3.0kHz
*VBW 10kHz
SWP 8.4sec


*ATTEN 20dB
MKR -32.17dBm
RL 41.0dBm
10dB/
94.6MHz
MKR
94.6 MHz
-32.17 dBm
D
R
START 30.0MHz
STOP 200.0MHz
*RBW 1.0MHz
*VBW 10kHz
SWP 50ms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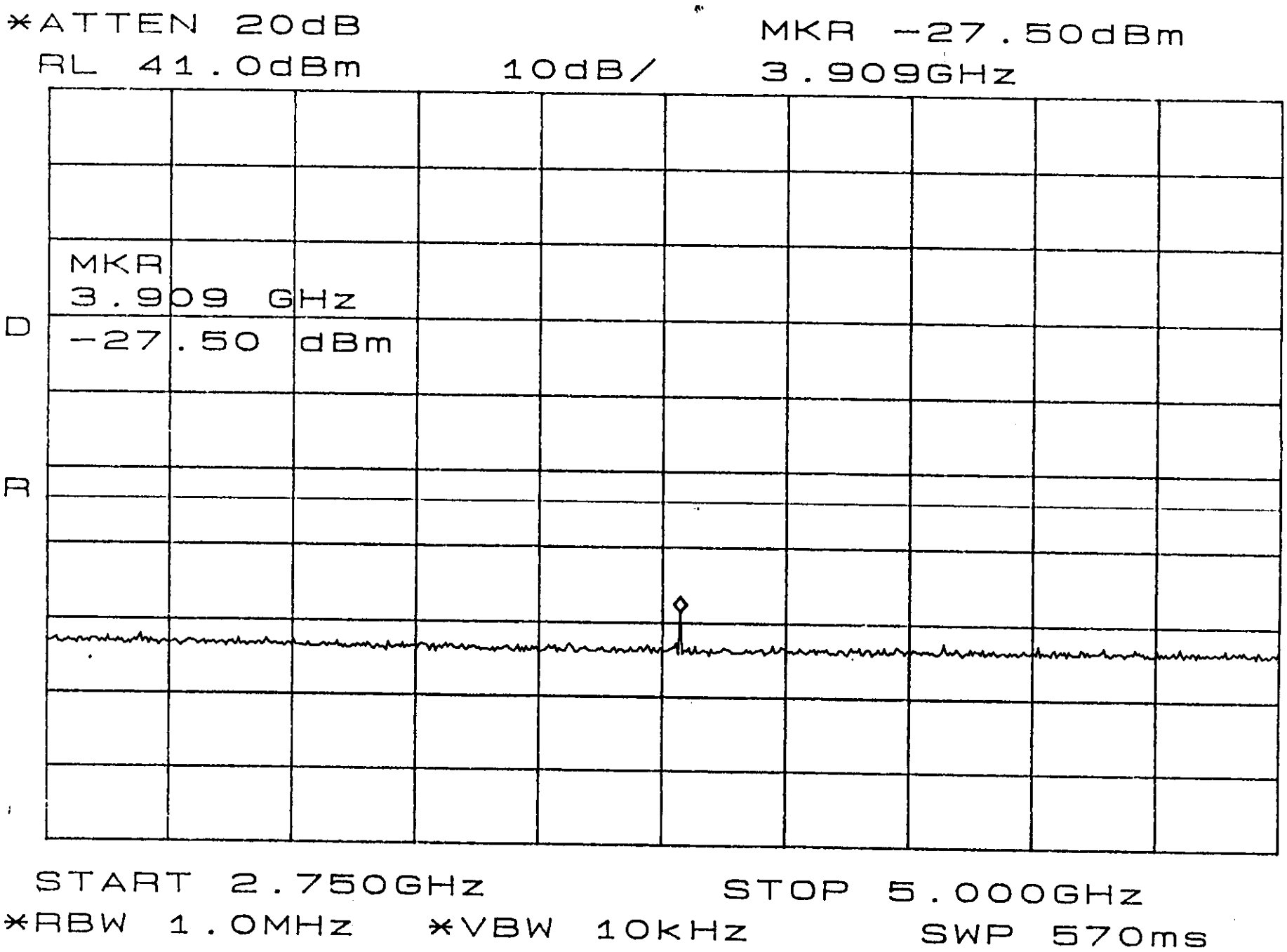
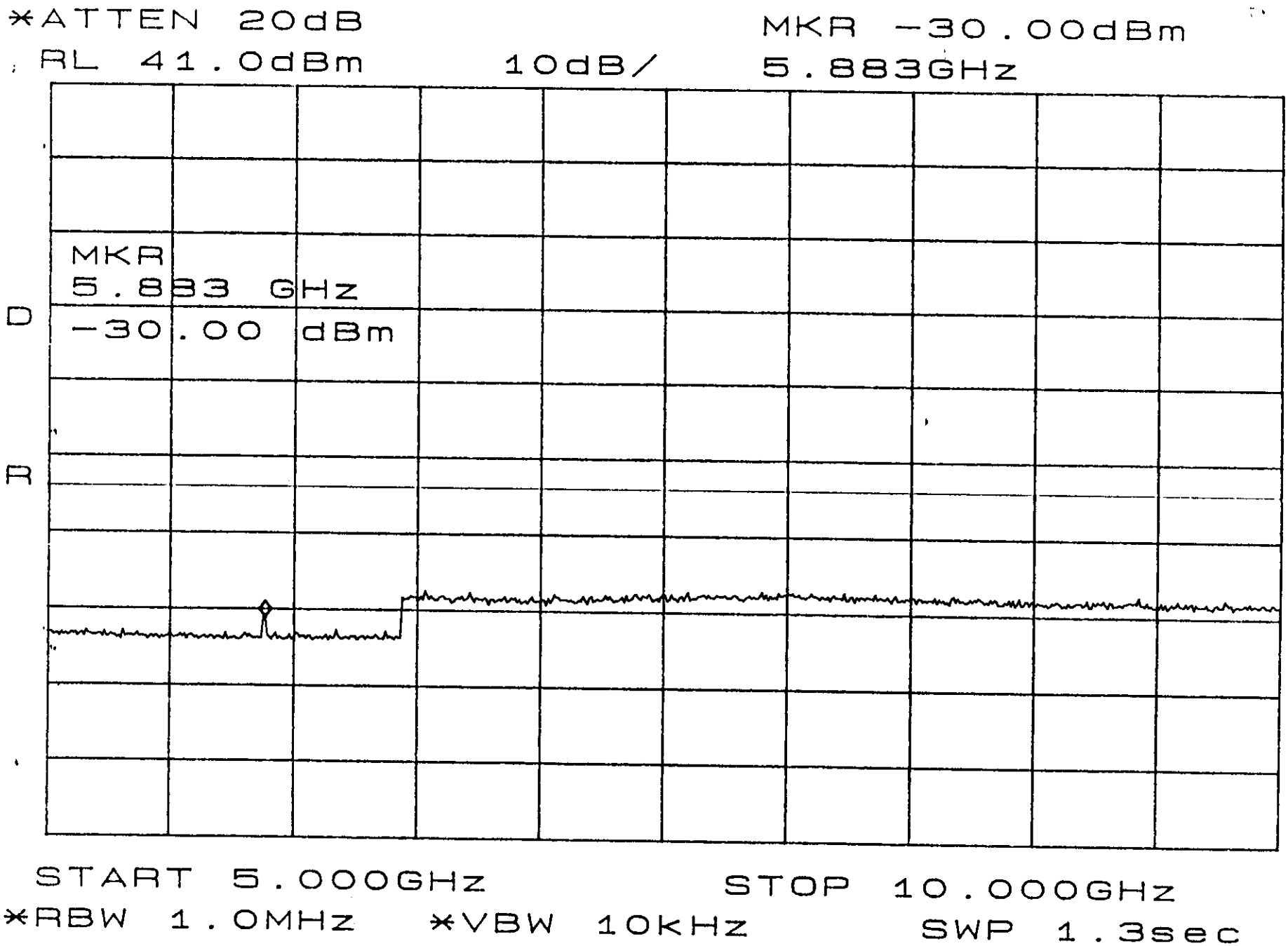
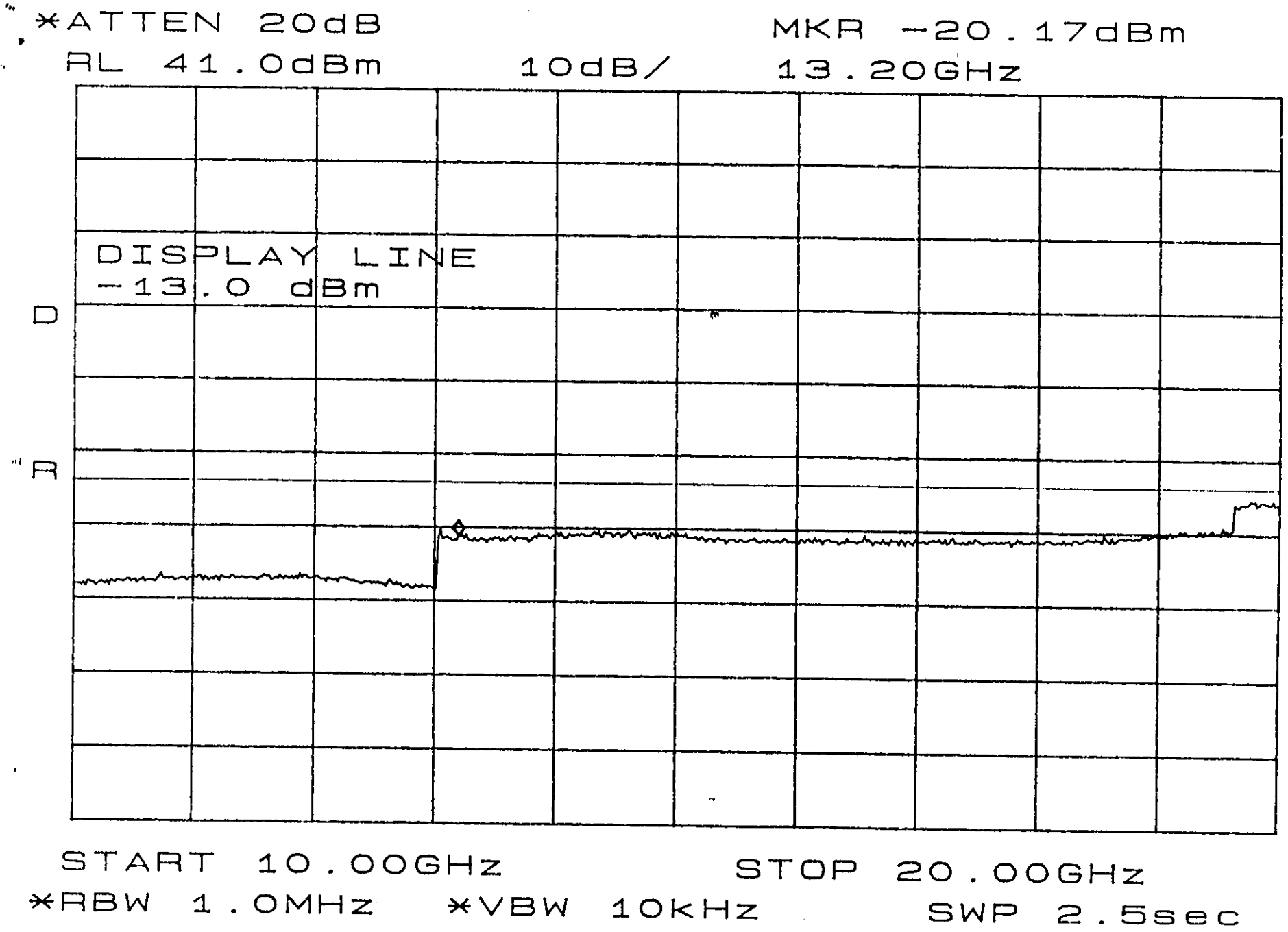
MKR -23.17dBm
RL 41.0dBm
10dB/
971MHz
MKR
971 MHz
-23.17 dBm
D
R
START 200MHz
STOP 2.700GHz
*RBW 1.0MHz
*VBW 10KHz
SWP 630ms


*ATTEN 20dB
MKR -27.50dBm
RL 41.0dBm
10dB/
3.909GHz
MKR
3.909 GHz
D
-27.50 dBm
R
START 2.750GHz
STOP 5.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 570ms


*ATTEN 20dB
MKR -30.00dBm
RL 41.0dBm
10dB/
5.883GHz
MKR
5.883 GHz
-30.00 dBm
D
R
START 5.000GHz
STOP 10.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 1.3sec


*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -20.17dBm
13.20GHz
DISPLAY LINE
-13.0 dBm
D
R
START 10.00GHz
STOP 20.00GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 2.5sec

SUBJECT: Spurious Emissions at Antenna Terminals FCC Part 24

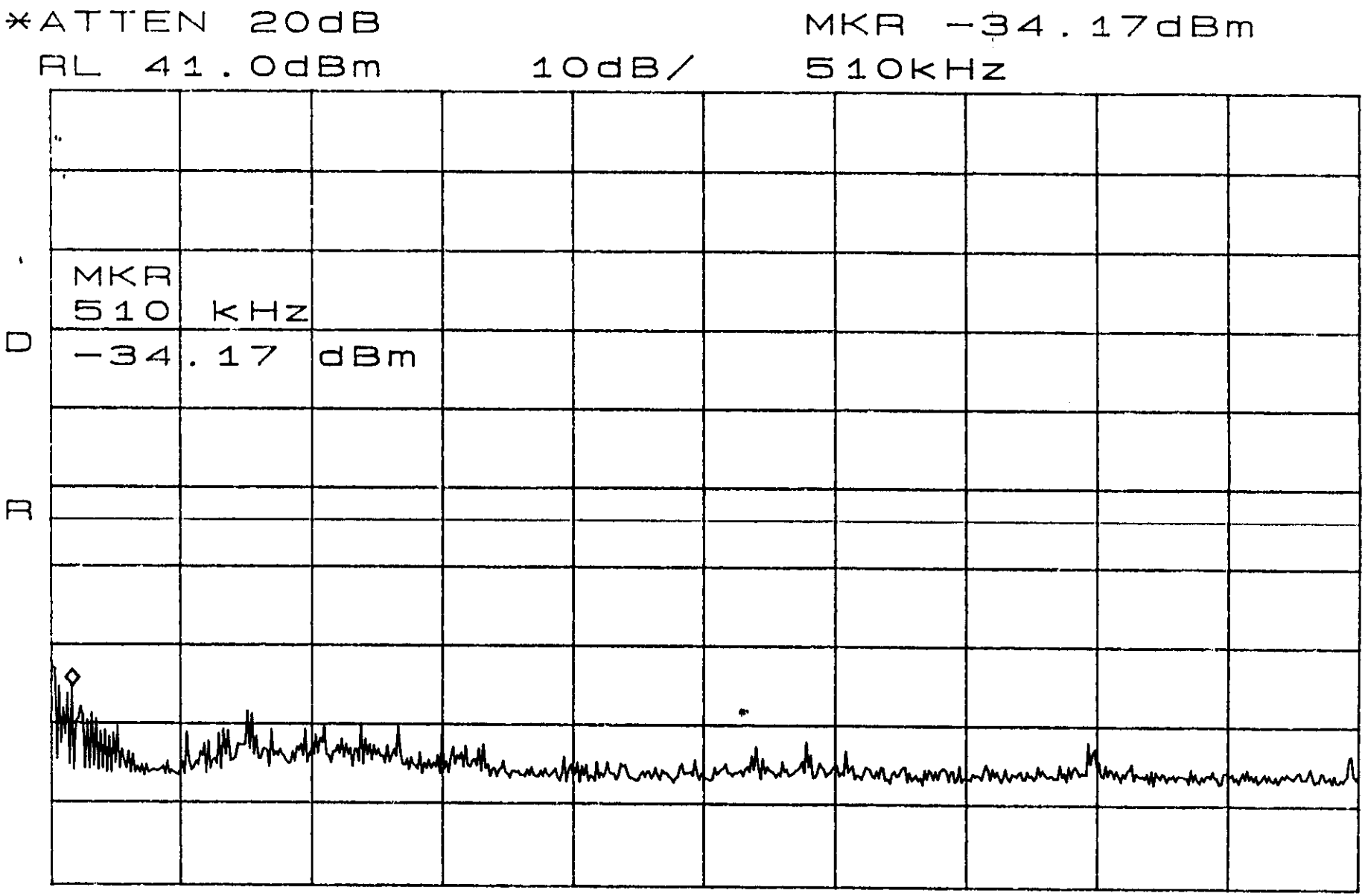
MET REPORT: EMI9333
MFG: NOKIA
TESTED BY: Kenneth Bass
TEST DATE(S): 14 Jan 1998

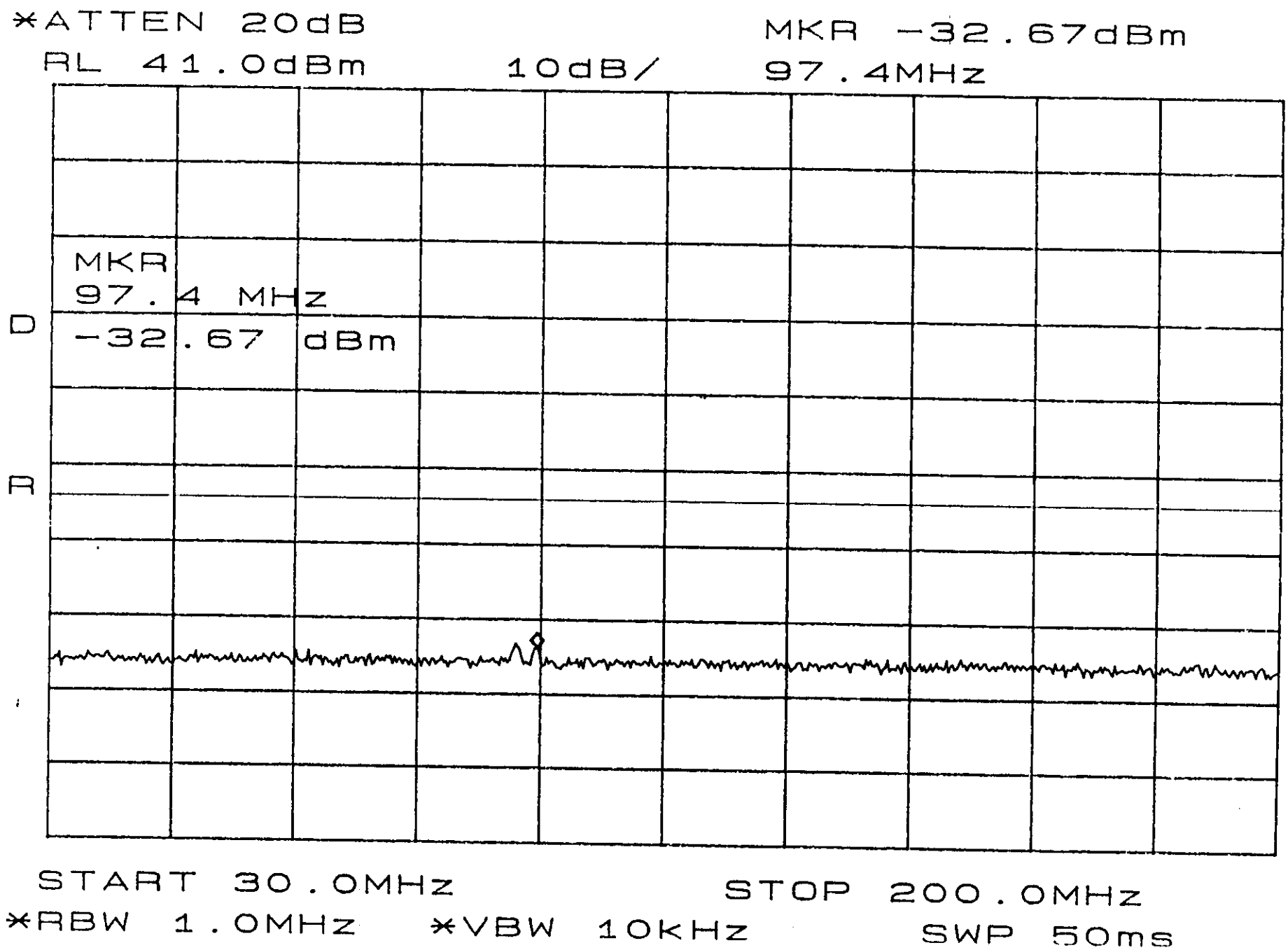
EUT: 3 dB Booster Module
MODEL: TBUL11

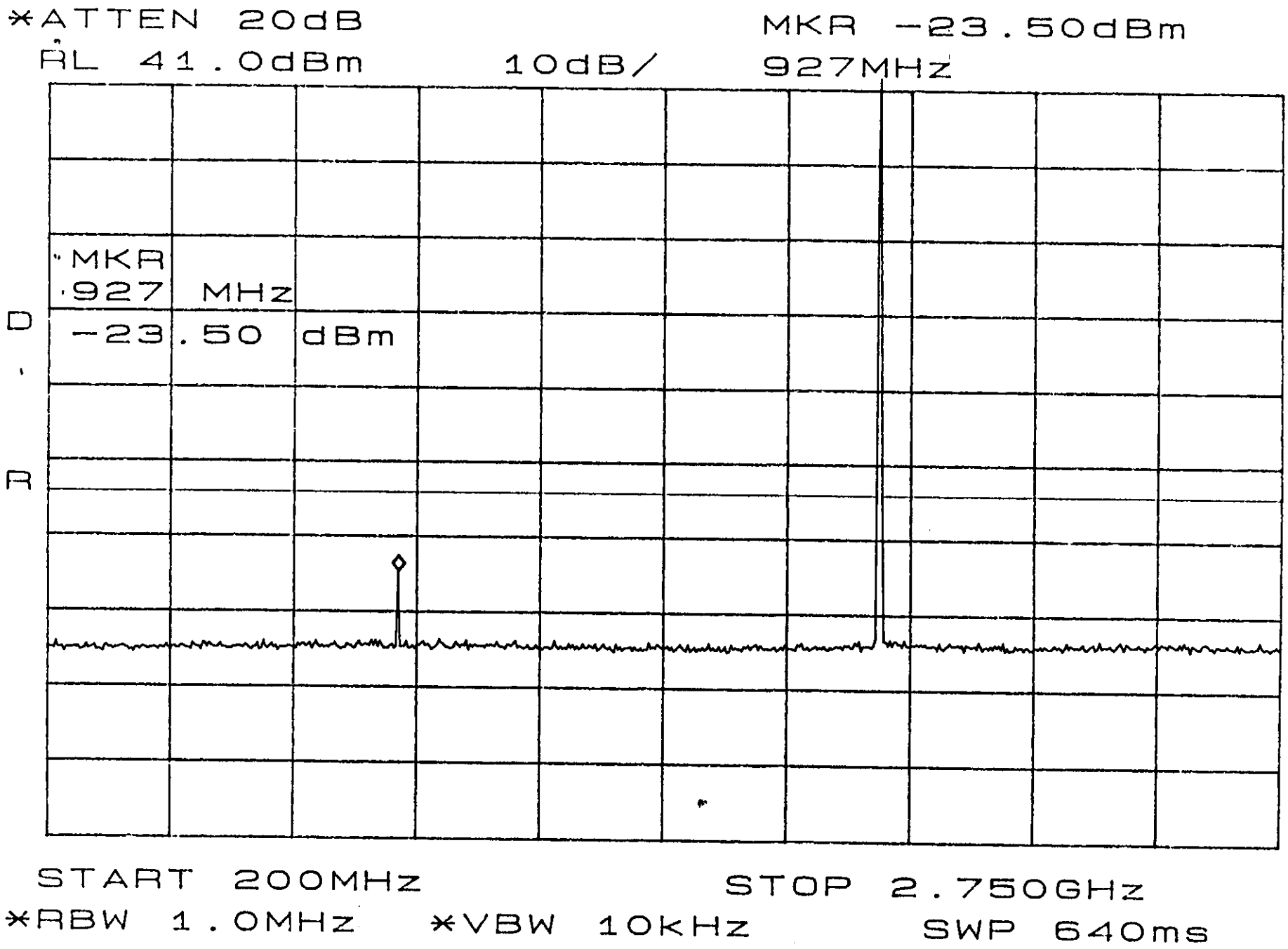
Comment: Equipment complies with Section 2.991. Plots of the spurious emissions as measured at the antenna port, appears on the following page.

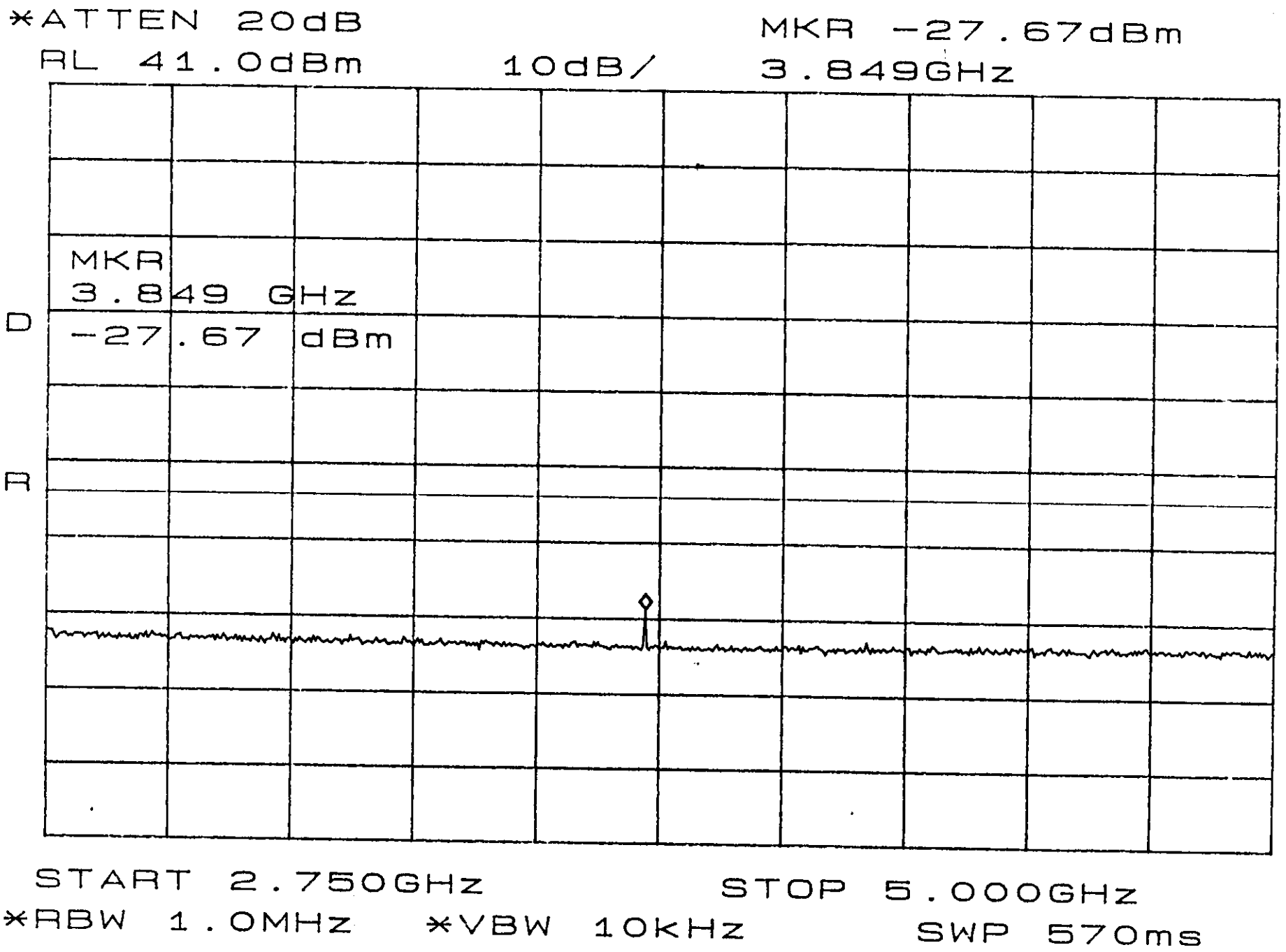
SPURIOUS EMISSIONS AT ANTENNA TERMINALS - BLOCK C

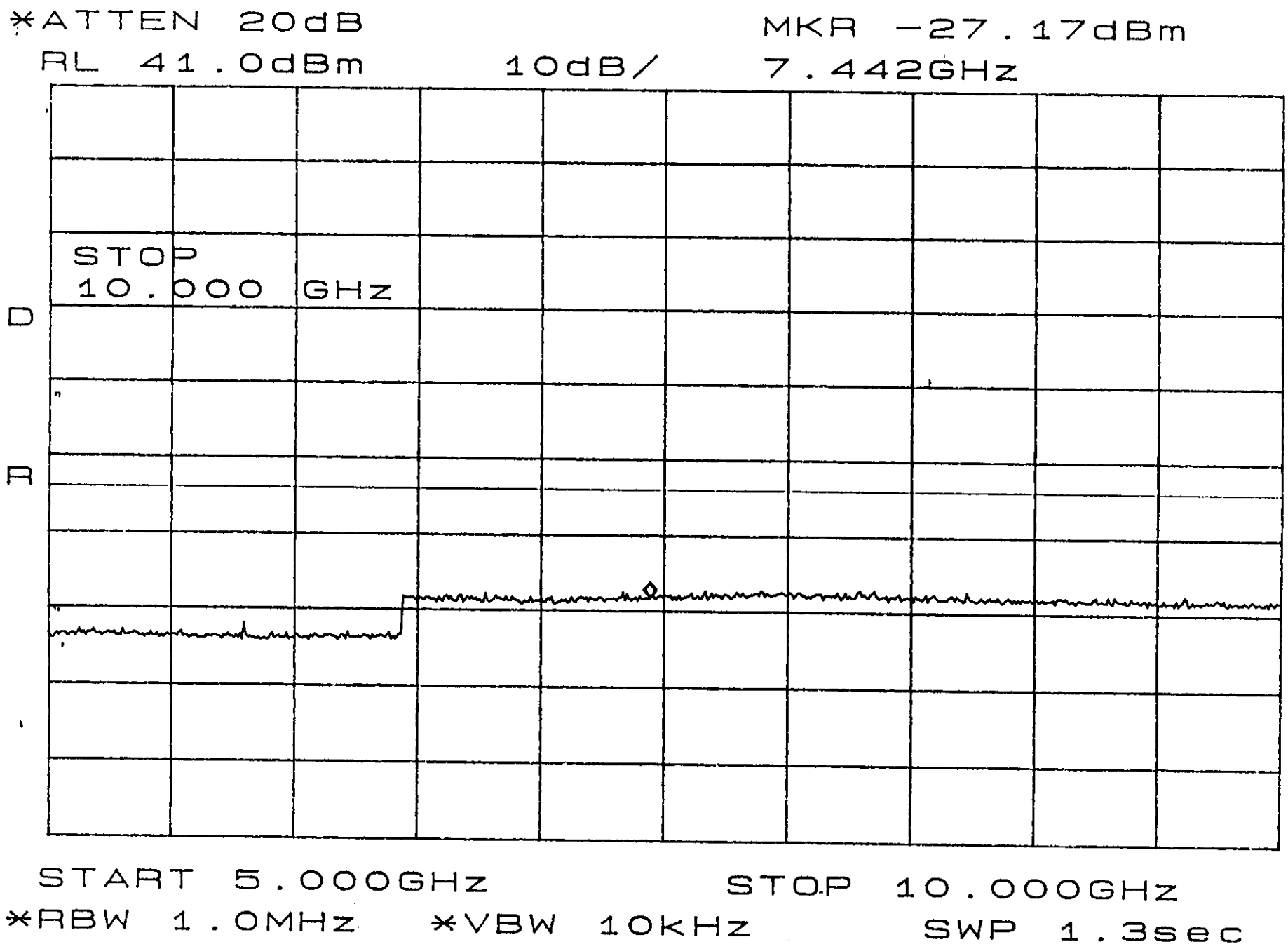
Frequency Range	Emission Frequency	Emission Level (dBm)	Limit (dBm)
10 kHz - 30 MHz	510 KHz	-34.17	-13.1
30 - 200 MHz	97.4	-32.67	-13.1
200 MHz - 2.75 GHz	927 MHz	-23.50	-13.1
2.75 - 5.0 GHz	3.849	-27.67	-13.1
5.0 - 10 GHz	none	n/a	-13.1
10 - 20 GHz	none	n/a	-13.1

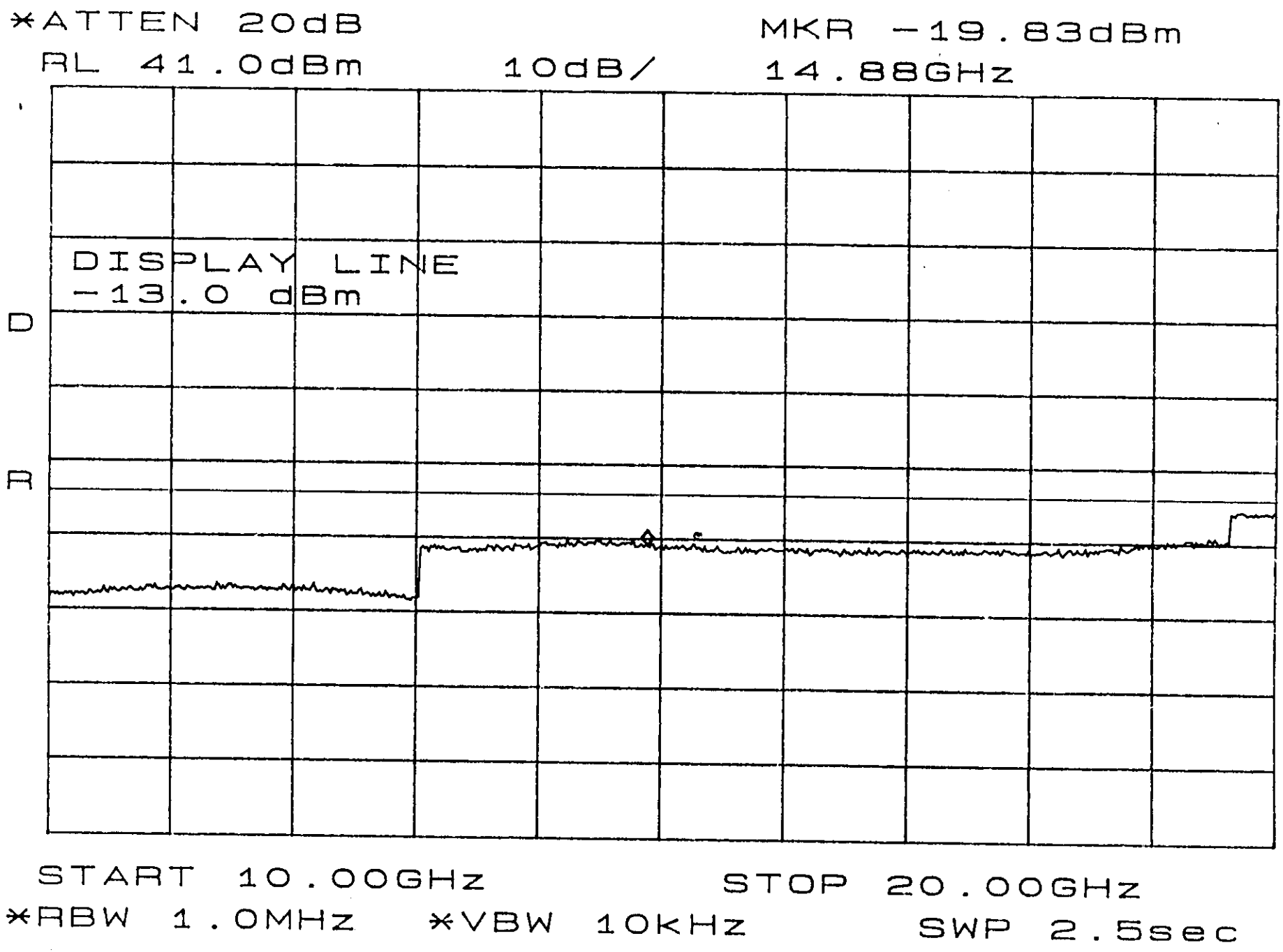

*ATTEN 20dB
MKR -34.17dBm
RL 41.0dBm
10dB/
510kHz
MKR
510 kHz
-34.17 dBm
D
R
START 10kHz
STOP 30.00MHz
*RBW 3.0kHz
*VBW 10kHz
SWP 8.4sec


*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -32.67dBm
97.4MHz
MKR
97.4 MHz
-32.67 dBm
D
R
START 30.0MHz
STOP 200.0MHz
*RBW 1.0MHz
*VBW 10KHz
SWP 50ms


*ATTEN 20dB
MKR -23.50dBm
RL 41.0dBm
10dB/
927MHz
*MKR
927 MHz
-23.50 dBm
D
R
START 200MHz
STOP 2.750GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 640ms


*ATTEN 20dB
RL 41.0dBm
10dB/
MKR -27.67dBm
3.849GHz
MKR
3.849 GHz
-27.67 dBm
D
R
START 2.750GHz
STOP 5.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 570ms


*ATTEN 20dB
MKR -27.17dBm
RL 41.0dBm
10dB/
7.442GHz
STOP
10.000 GHz
D
R
START 5.000GHz
STOP 10.000GHz
*RBW 1.0MHz
*VBW 10kHz
SWP 1.3sec


*ATTEN 20dB
MKR -19.83dBm
RL 41.0dBm
10dB/
14.88GHz
DISPLAY LINE
-13.0 dBm
D
R
START 10.00GHz
STOP 20.00GHz
*RBW 1.0MHz
*VBW 10KHz
SWP 2.5sec

SUBJECT: Spurious Emissions at Antenna Terminals at Block Edges **(For previously blocked/guard band Channels)** FCC Part 24

MET REPORT: EMI9333
MFG: NOKIA

TESTED BY: Kenneth Bass
TEST DATE(S): 14 Jan 1998

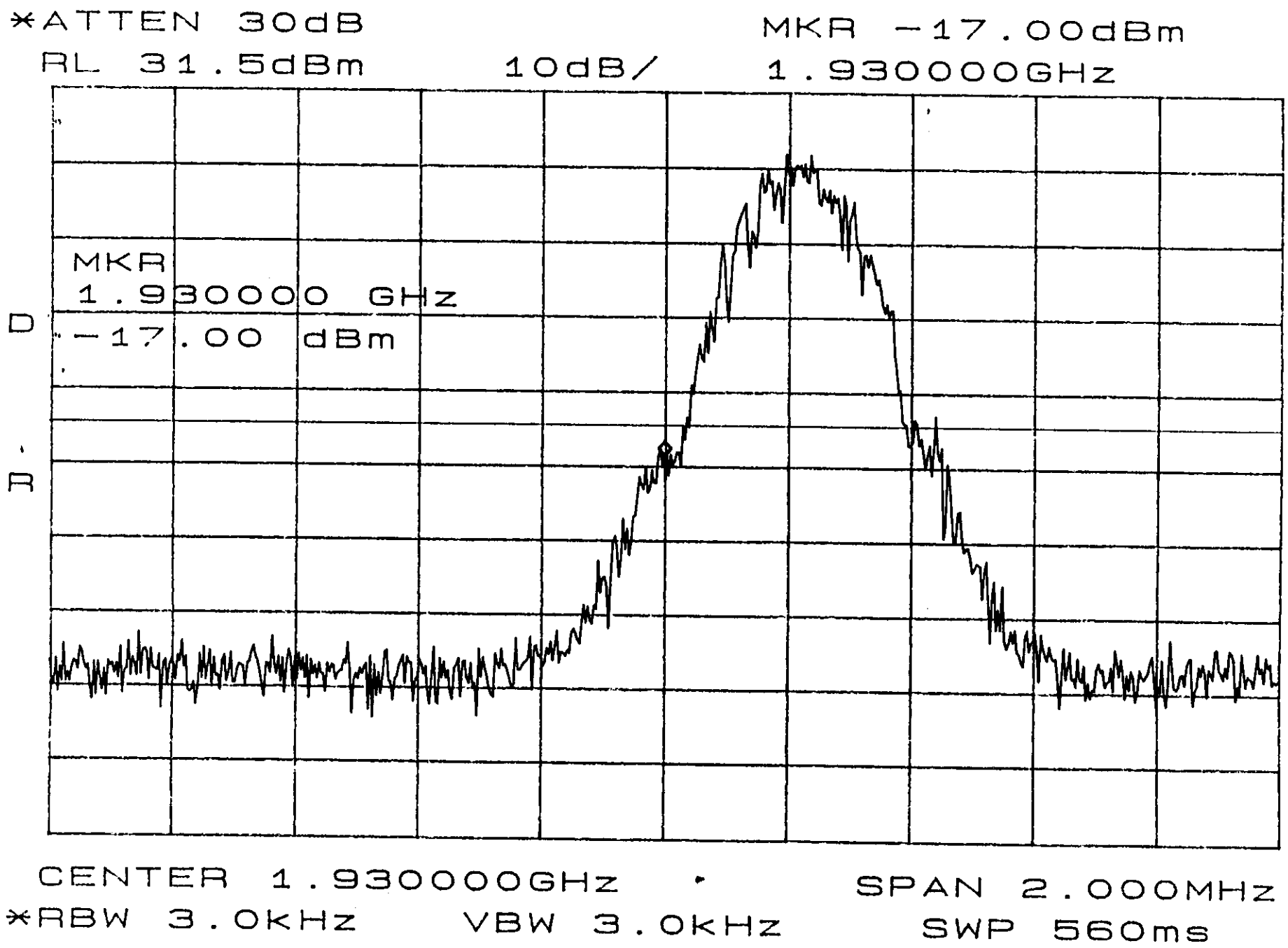
EUT: 3 dB Booster Module
MODEL: TBUL11

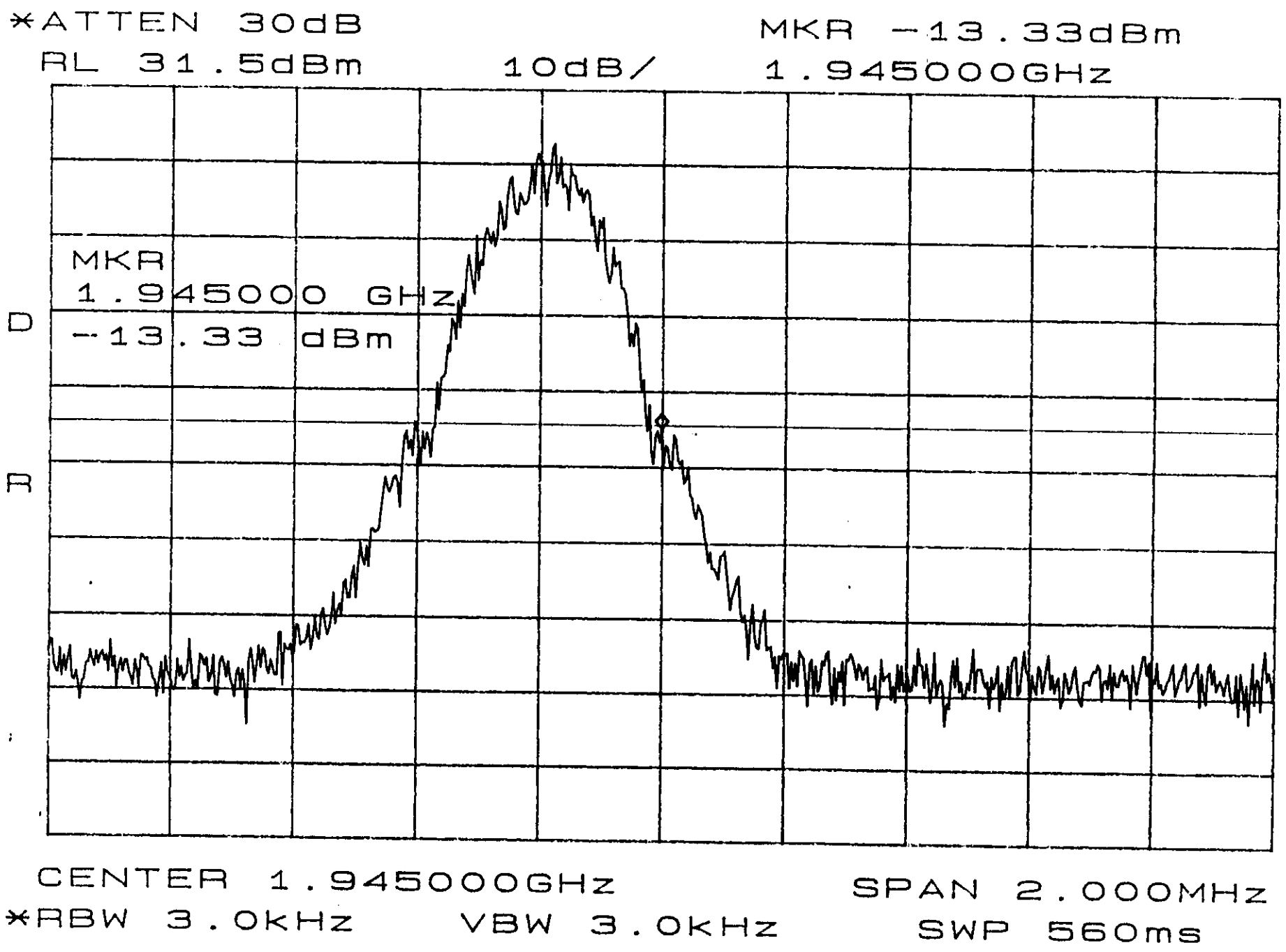
Modulation products outside of this band are attenuated at least 43 + 10 Log (P) below the level of the modulated carrier. A Plot of the spurious emissions at +/- 1 MHz around the transmit frequency, as measured at the antenna port, appears on the following page.

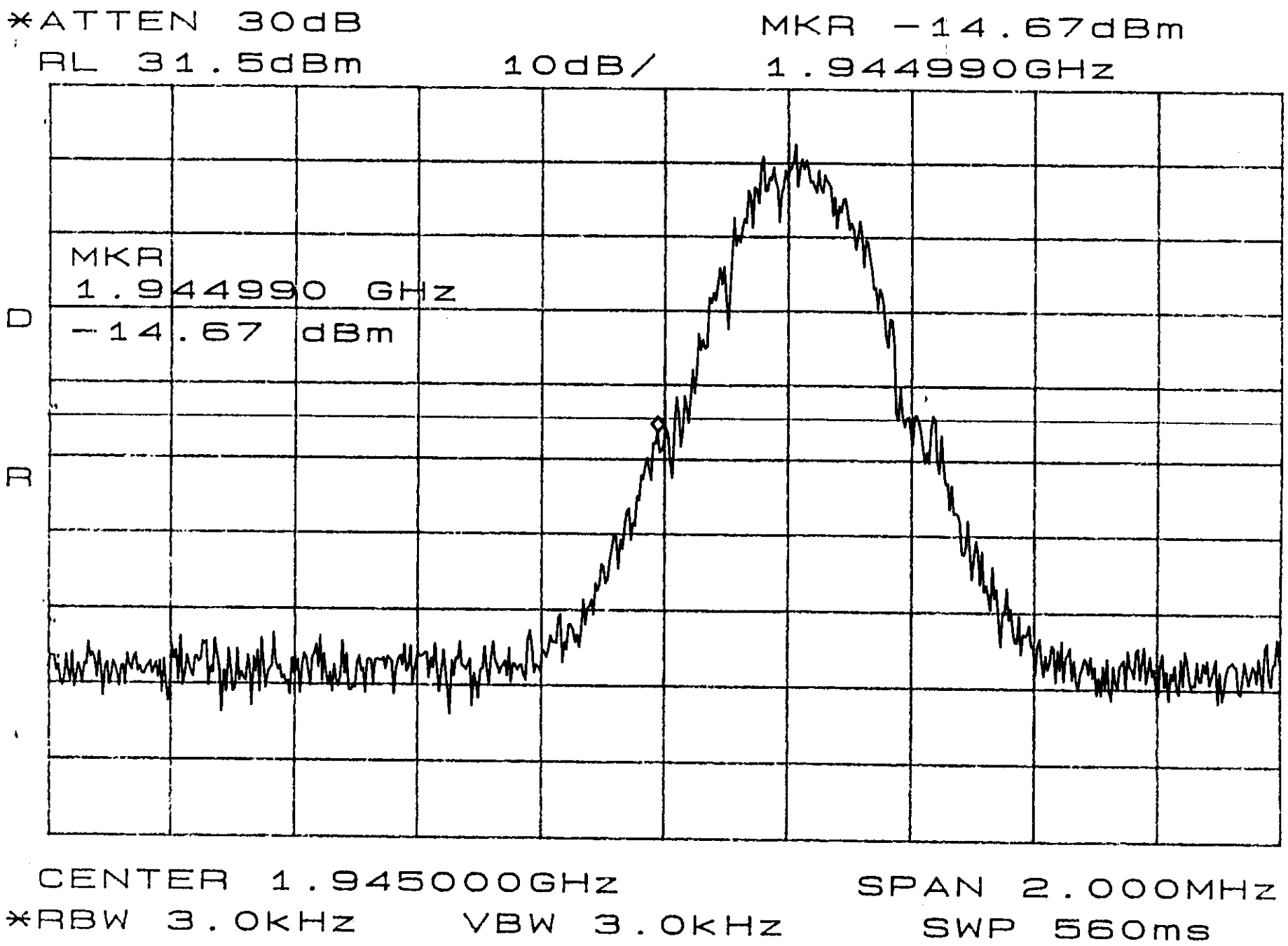
SPURIOUS EMISSION FREQUENCY BLOCKS

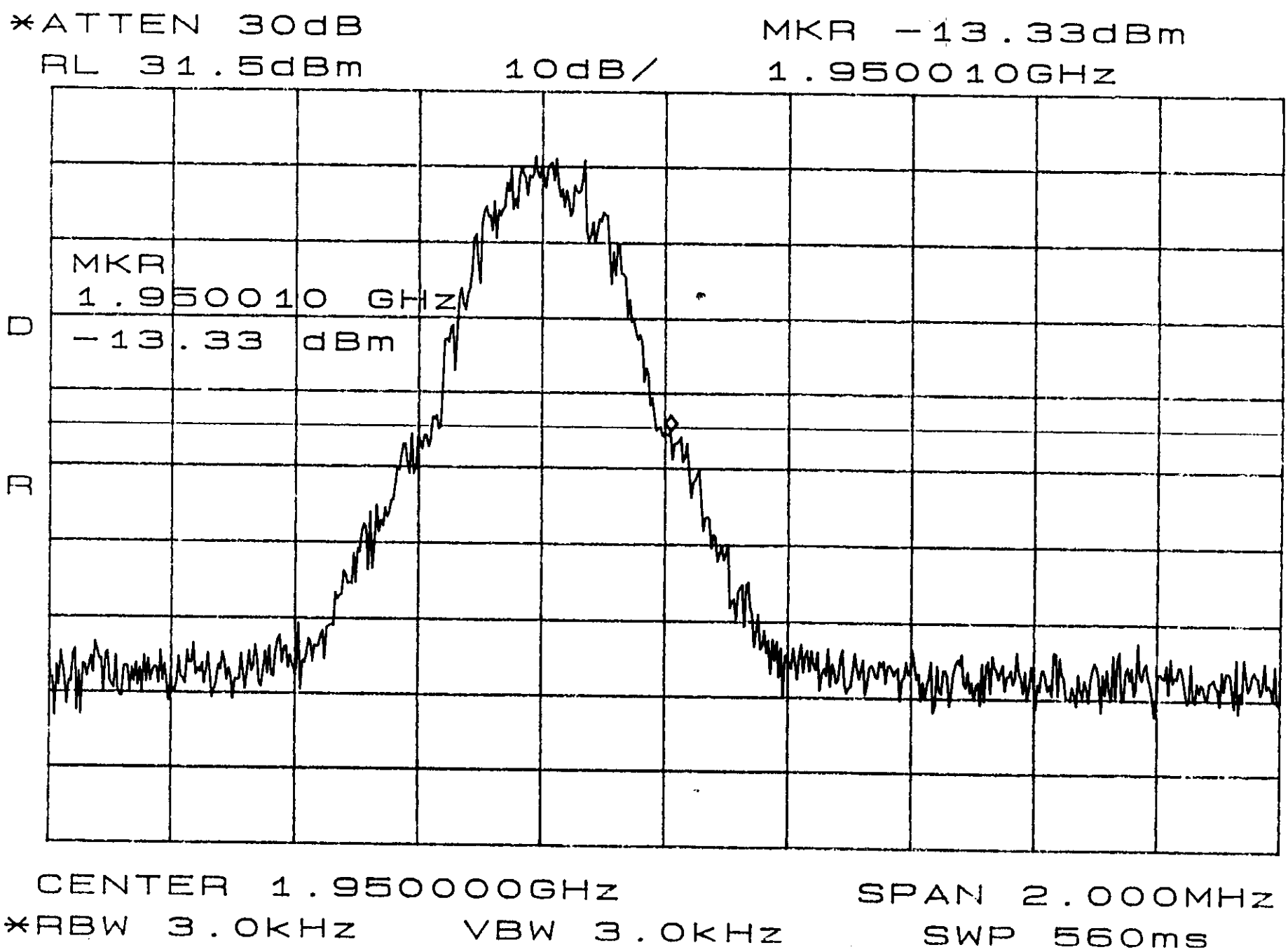
Frequency Block (MHz)	Low Frequency (CH #)	Hi Frequency (CH #)
A (1930 - 1945)	512 (1930.2)	585 (1944.8)
B (1950 - 1965)	612 (1950.2)	685 (1964.8)
C (1975 - 1990)	737 (1975.2)	810 (1989.8)
D (1945 - 1950)	587 (1945.2)	610 (1949.8)
E (1965 - 1970)	687 (1965.2)	710 (1969.8)
F (1970 - 1975)	712 (1969.2)	734 (1974.8)

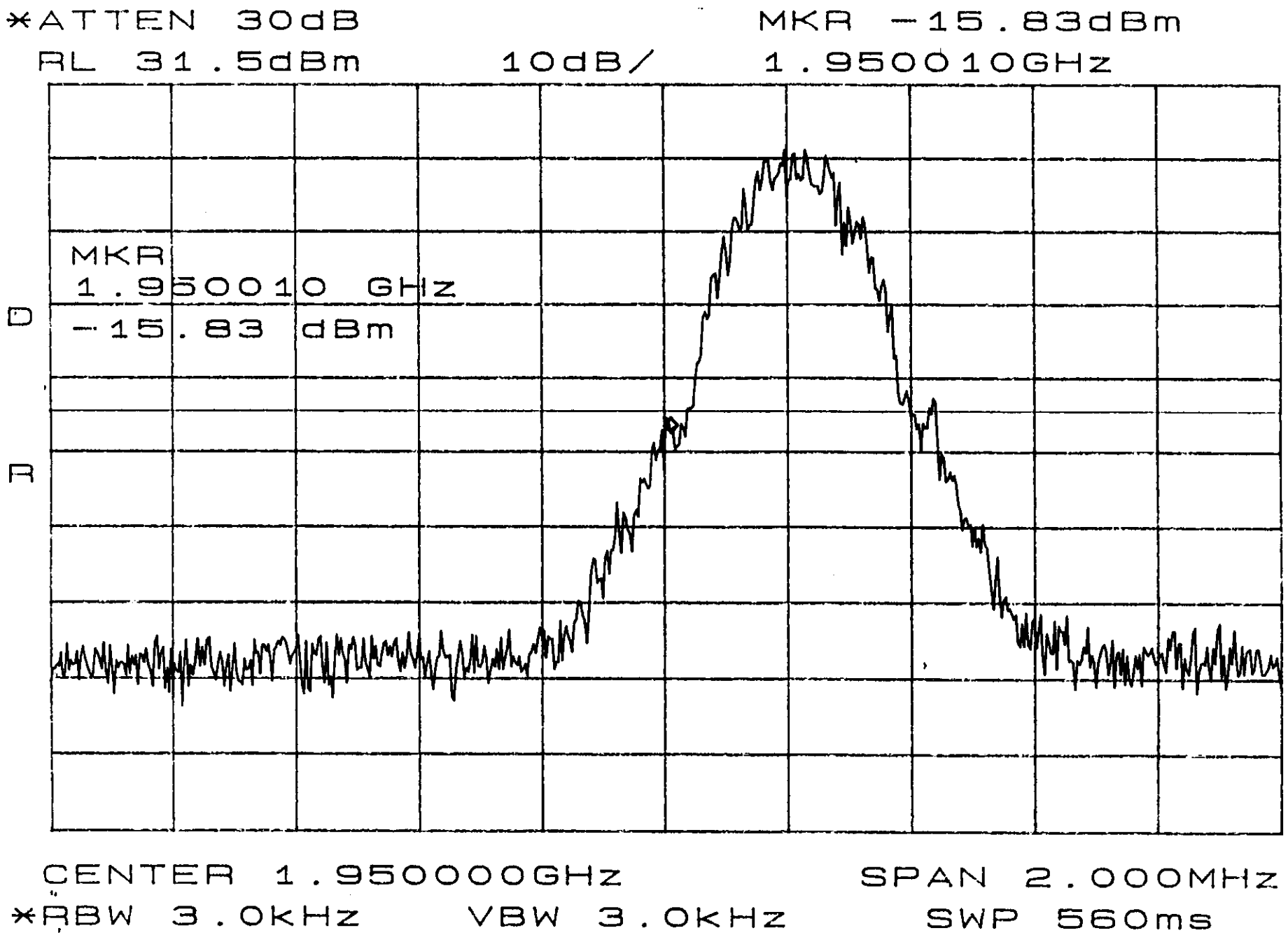
Plots of the spurious emissions as measured at the extremes of each frequency block appear on the following pages.

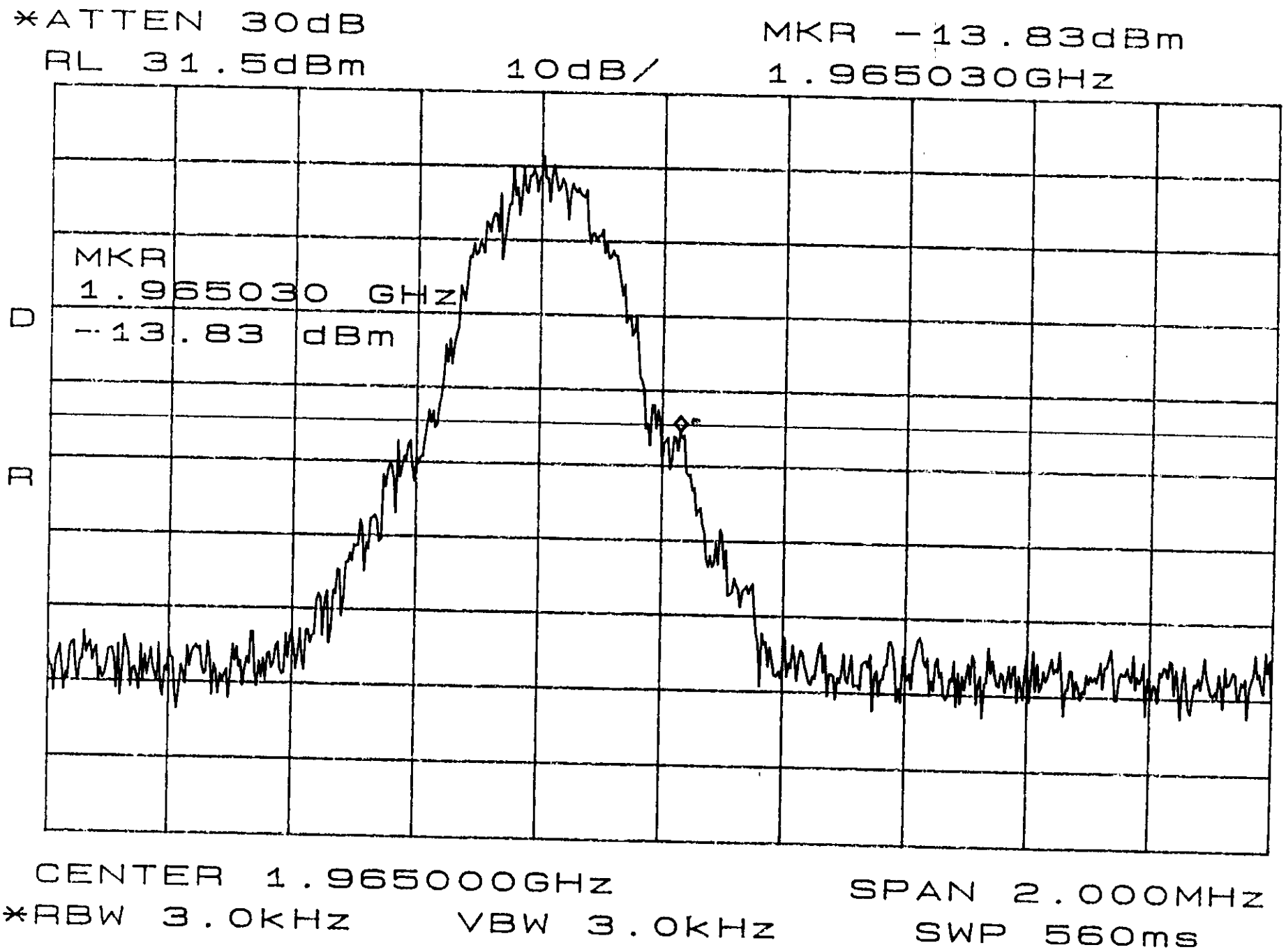

*ATTEN 30dB
MKR -17.00dBm
RL 31.5dBm
10dB/
1.930000GHz
MKR
1.930000 GHz
-17.00 dBm
CENTER 1.930000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms

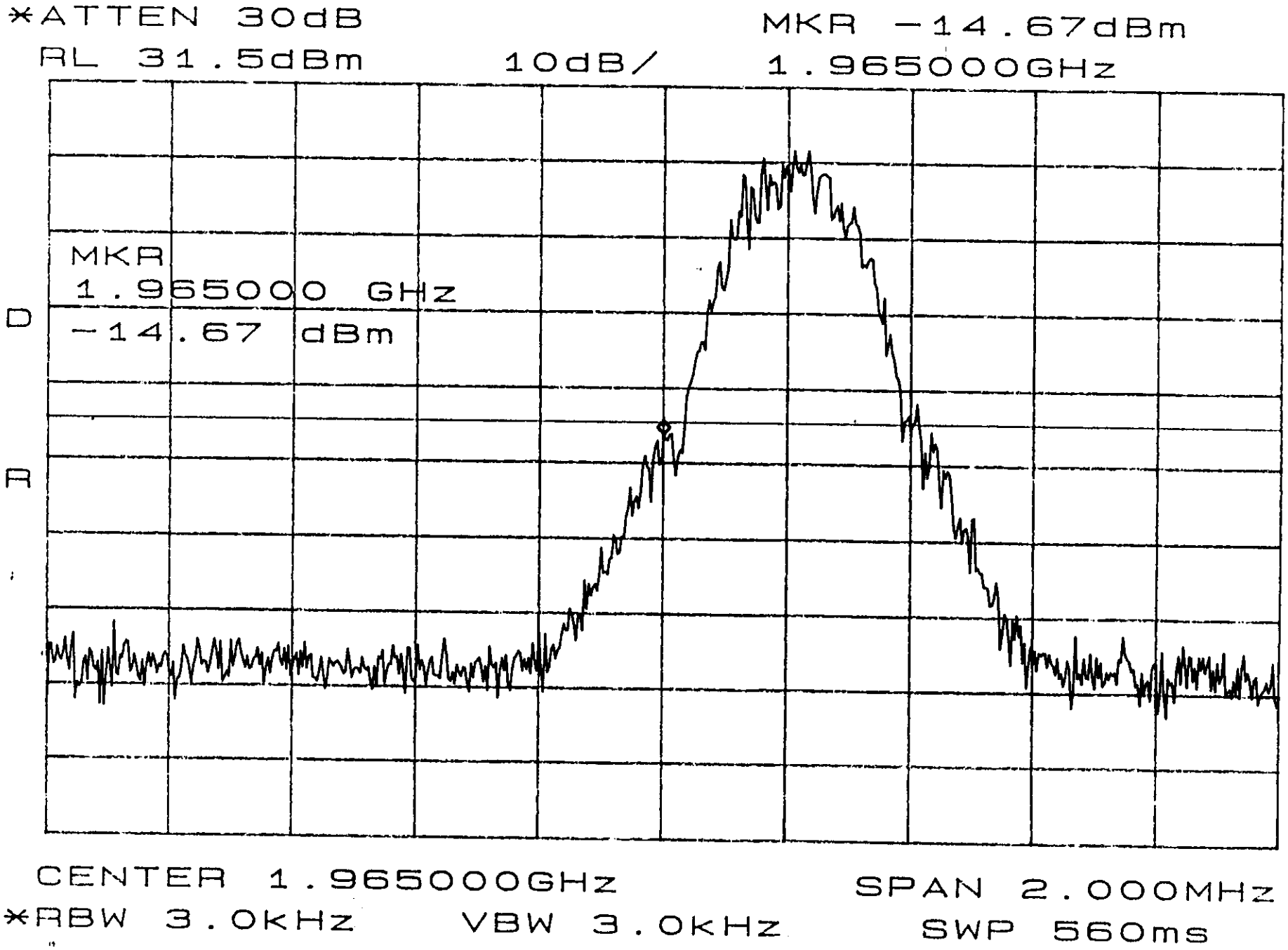

*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -13.33dBm
1.945000GHz
MKR
1.945000 GHz
-13.33 dBm
D
R
CENTER 1.945000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms

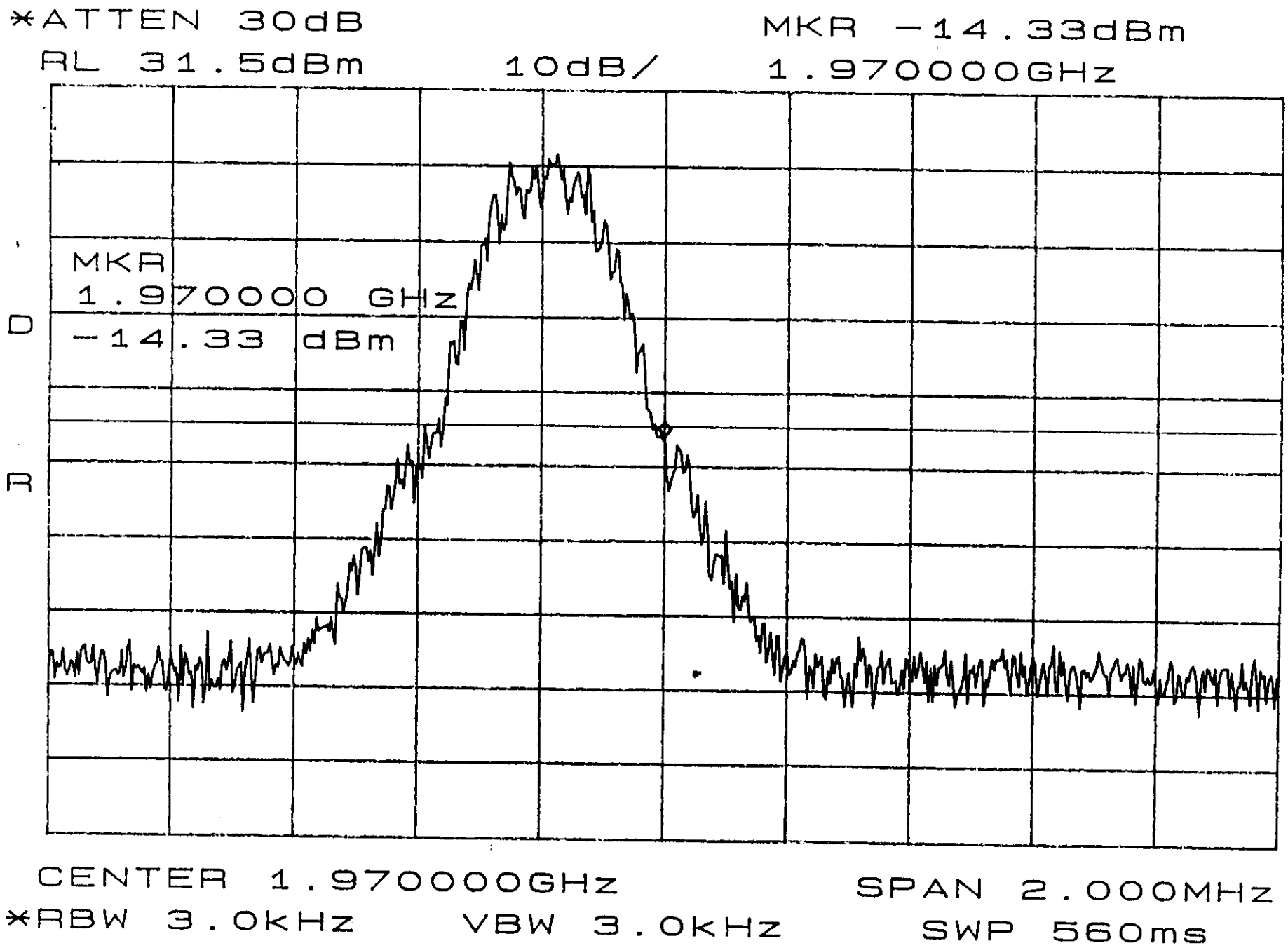

*ATTEN 30dB
RL 31.5dBm
10dB/
MKR −14.67dBm
1.944990GHz
MKR
1.944990 GHz
−14.67 dBm
D
R
CENTER 1.945000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms

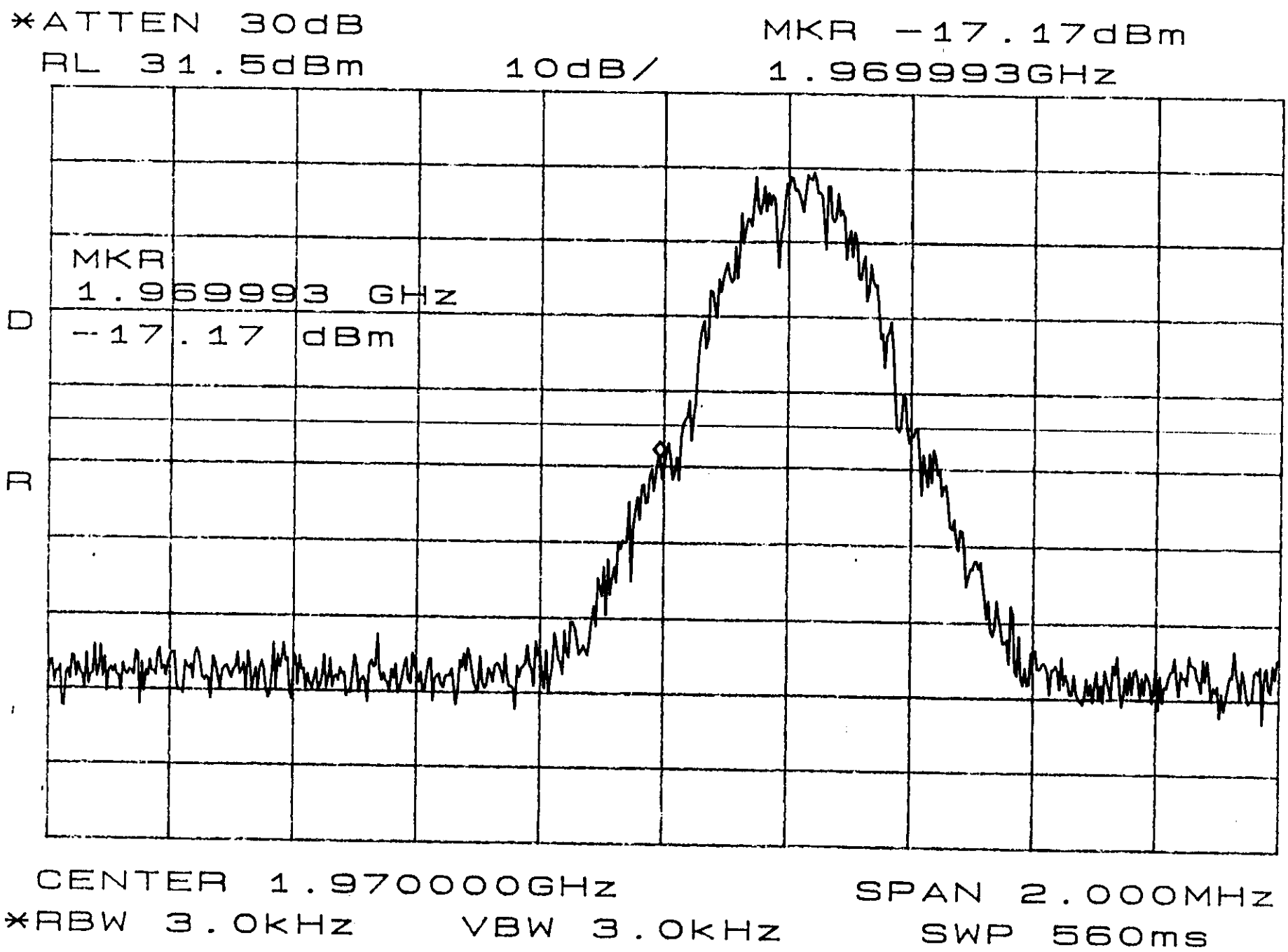

*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -13.33dBm
1.950010GHz
MKR
1.950010 GHz
-13.33 dBm
D
R
CENTER 1.950000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms

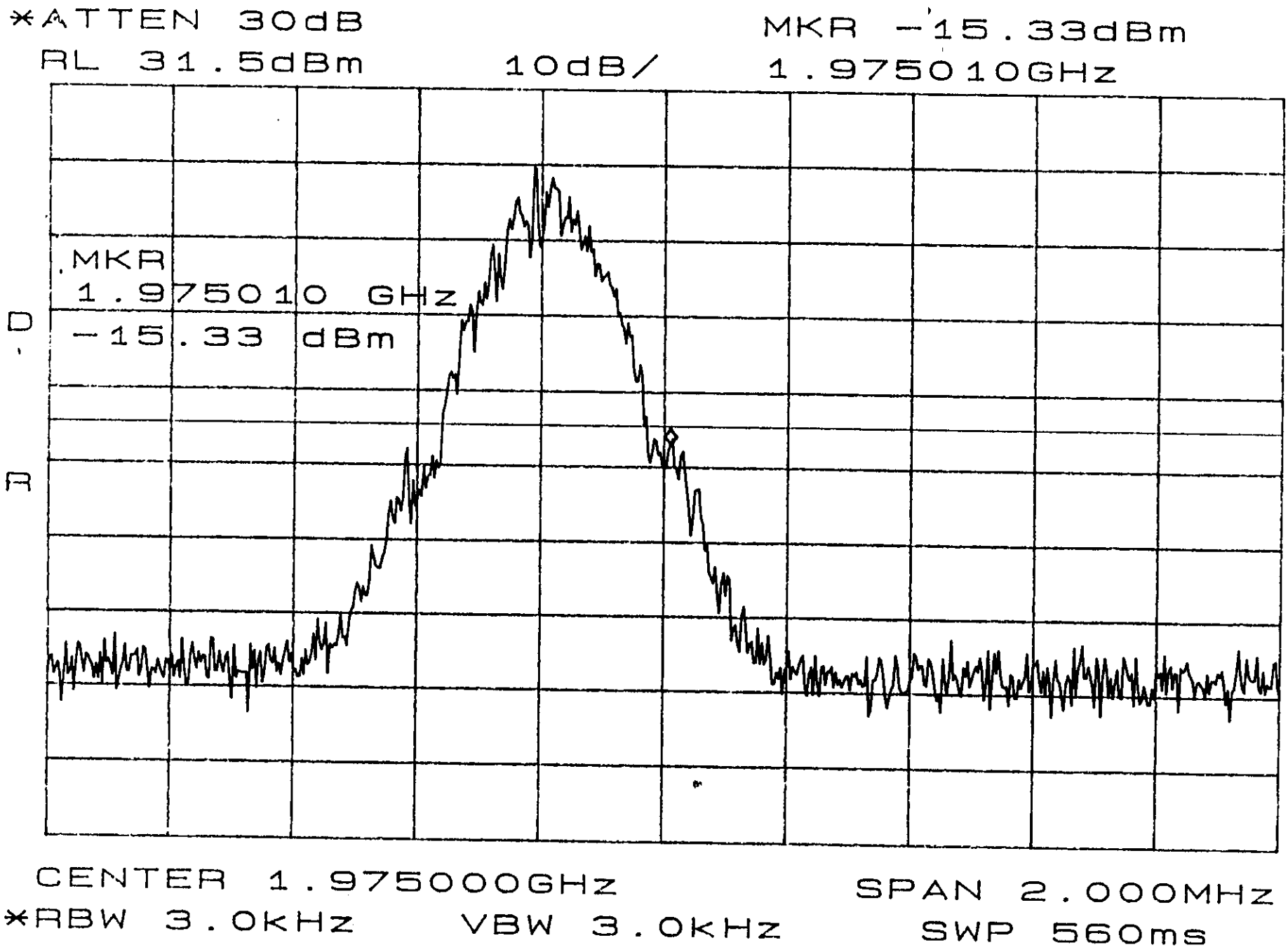

*ATTEN 30dB
MKR -15.83dBm
RL 31.5dBm
10dB/
1.950010GHz
MKR
1.950010 GHz
-15.83 dBm
D
R
CENTER 1.950000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms

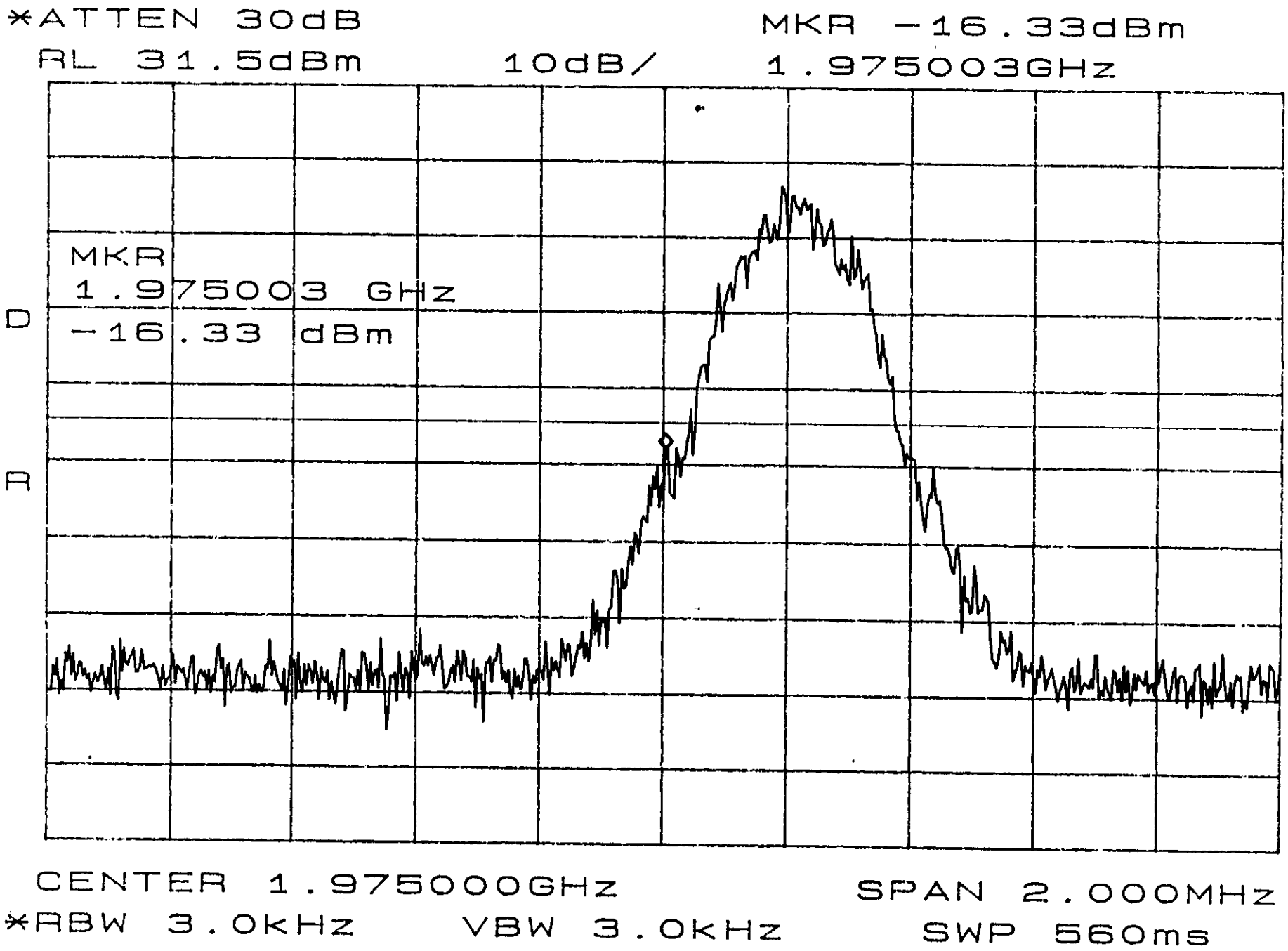

*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -13.83dBm
1.965030GHz
MKR
1.965030 GHz
-13.83 dBm
D
R
CENTER 1.965000GHz
*RBW 3.0kHz
VBW 3.0kHz
SPAN 2.000MHz
SWP 560ms

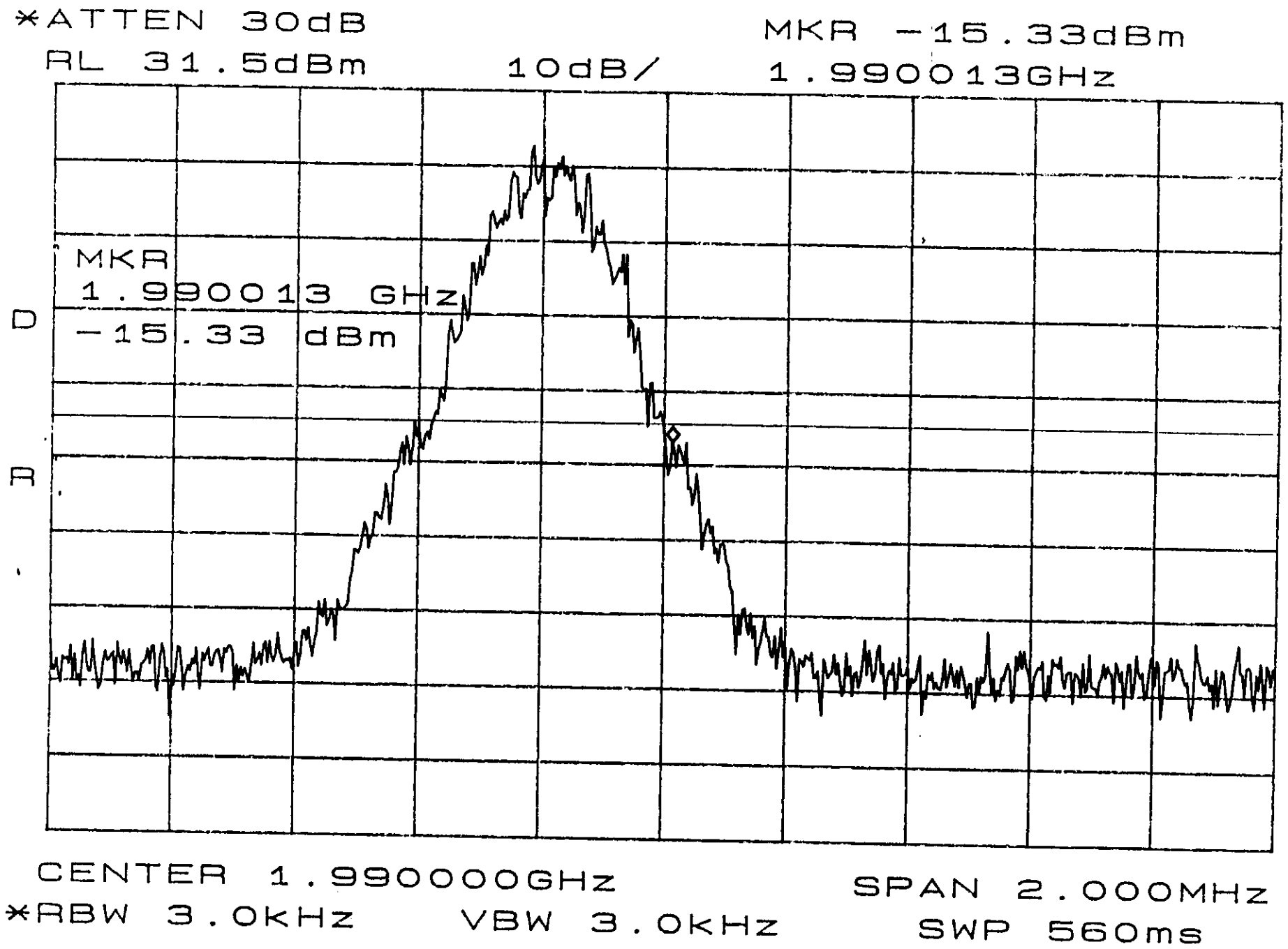

*ATTEN 30dB
RL 31.5dBm
10dB/
MKR −14.67dBm
1.965000GHz
MKR
1.965000 GHz
−14.67 dBm
D
R
CENTER 1.965000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms


*ATTEN 30dB
RL 31.5dBm
10dB/
MKR −14.33dBm
1.970000GHz
MKR
1.970000 GHz
−14.33 dBm
D
R
CENTER 1.970000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms


*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -17.17dBm
1.969993GHz
MKR
1.969993 GHz
-17.17 dBm
D
R
CENTER 1.970000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms


*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -15.33dBm
1.975010GHz
MKR
1.975010 GHz
-15.33 dBm
D
R
CENTER 1.975000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms


*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -16.33dBm
1.975003GHz
MKR
1.975003 GHz
-16.33 dBm
D
R
CENTER 1.975000GHz
SPAN 2.000MHz
*RBW 3.0KHz
VBW 3.0KHz
SWP 560ms


*ATTEN 30dB
RL 31.5dBm
10dB/
MKR -15.33dBm
1.990013GHz
MKR
1.990013 GHz
-15.33 dBm
D
R
CENTER 1.990000GHz
SPAN 2.000MHz
*RBW 3.0kHz
VBW 3.0kHz
SWP 560ms